RESPONSIVENESS SUMMARY

Antidegradation Policy and Implementation Procedures

Prepared by the
Iowa Department of Natural Resources
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Introduction

This is a summary of the comments received in response to proposed revisions to the Environmental Protection Commission's (EPC's) water quality standards (WQS). Comments were received at three different times throughout this rule making effort. The proposed changes were originally published in the Notice of Intended Action ARC 7368B on November 19, 2008 with public comments collected through January 29, 2009. This Notice of Intended Action was later amended as ARC 8038B on August 12, 2009 with public comments collected through September 15, 2009. The Administrative Rules Review Committee requested a formal regulatory analysis on September 9, 2009, specific to ARC 8038B, to estimate the impact OIW protections would have on the growth and economies of neighboring rural communities with public comments collected though November 10, 2009.

This document breaks down these three different comment periods and provides a discussion of the issues raised by the comments as well as recommendations for final EPC action on the proposed changes.

Summary of Rule/Rule Changes:

1. Incorporate by reference the document entitled "Iowa Antidegradation Implementation Procedure," which proposes an approach to be followed in assessing and minimizing degradation of Iowa's surface waters.
2. Update antidegradation policy language with four tier approach
3. Remove High Quality (Class HQ) and High Quality Resource (Class HQR) designated uses, as they are being replaced by the four tier approach.

Iowa Code (Sections 455B.171 – 455B.183) establishes requirements for the protection and management of surface water quality. The Environmental Protection Commission, through the assistance of the department, promulgates administrative regulations on water quality. Iowa's Water Quality Standards (WQS) are written into regulation at 567 IAC Chapter 61 – Water Quality Standards. The specific portion of the regulation prescribing the policy on antidegradation is 567 IAC Chapter 61.2(2).

The antidegradation rule is one of three required regulatory elements of the WQS. The other two elements include beneficial uses, and water quality criteria (narrative and numeric). All of these review elements must be administered as a whole. All surface waters of the state are subject to antidegradation provisions. The main purpose of the antidegradation policy and implementation procedures is to protect existing uses of surface waters and to specify how the department will determine, on a case-by-case basis, whether and to what extent, existing water quality may be lowered in a surface water.

The Iowa Department of Natural Resources is required by 40 CFR §131.12(a) to develop and adopt a statewide antidegradation policy and to identify procedures for implementing that policy. There has been an antidegradation policy in the WQS, but formal implementation procedures were absent which limited the policy's usefulness. The

proposed implementation procedures include identifying the antidegradation review levels (i.e., the "tiers") that apply to a surface water; determining existing water quality; assessing and determining water quality degradation; identifying and assessing less-degrading or non-degrading alternatives; determining the importance of economic or social development to justify degradation of waters; and establishing intergovernmental coordination and public participation processes.

The antidegradation policy and implementing procedures are intended to provide guidance to persons who are responsible for the regulated activities that may degrade water quality in Iowa. Regulated activities include any activity that requires a CWA permit or a water quality certification pursuant to federal law.

This effort will also establish the Outstanding National Resource Waters (ONRW) and Outstanding Iowa Waters (OIW) antidegradation use categories. These categories will provide an increased level of protection where degradation is prohibited except in limited circumstances. The implementation procedures detail how the public can nominate a surface water to be afforded these levels of protection to the department.

Overall 13 public hearings were held; nine hearings for ARC 7368B: Des Moines on December 12, 2008; Washington on December 15, 2008; Atlantic and Storm Lake on December 17, 2008; Clear Lake on December 18, 2008; Milford on January 8, 2009; Davenport on January 15, 2009; and Independence and Waukon on March 3, 2009. Three hearings were held for ARC 8038B: Elkader and Waukon on September 1, 2009; and Milford on September 3, 2009. One hearing was held for the Regulatory Analysis in Des Moines on November 10, 2009. Notice of the hearings was sent to interest groups and statewide news network organizations.

Approximately 930 persons or groups provided oral or written comments on the proposed WQS revisions (The commentators' names are listed in the Appendices 1, 2, & 3). The responsiveness summary attempts to address all of the comments received. The comments received are grouped by comment period and addressed below in terms of the issues involved. The department did not list every comment received, but rather merged common comments into major issue areas. The department did attempt to address every technical and miscellaneous question or comment received.

Recommendations

Based on comments from the public, DNR recommends several changes to the Antidegradation Implementation Procedure document. Several non-substantive corrections, such as formatting, sentence restructuring, deletion of redundant sections, were made to final version of the "Iowa Antidegradation Implementation Procedure" to make it easier to understand, to provide consistency and to clarify the original intent of certain aspects of the rule. The major substantive changes made to the "Iowa Antidegradation Implementation Procedure" prior to presentation to the Commission are listed below. The changes were of the same character and logical outgrowth of the prior notices and public hearings. The comments received by the Department indicate that the affected parties anticipated that these issues would be addressed in the final rule.

1. Revised the Tier 2 language in Section 1.2 of the "Iowa Antidegradation Implementation Procedure" to clarify where Tier 2 protection applies.

2. Revised Tier 2 ½ language in Section 1.2 of the "Iowa Antidegradation Implementation Procedure" to reflect the three scenarios where degradation of an Outstanding Iowa Water may occur.

3. Revised the nomination and review criteria for Outstanding Iowa Waters and Outstanding National Resource Waters in Section 1.3 of the "Iowa Antidegradation Implementation Procedure" to provide additional clarity and detail to the department's expectations of the nomination process and criteria needing to be met for a successfully nominate a water as an Outstanding Iowa Water or Outstanding National Resource Water.

4. Deleted the combined sewer overflow language in Section 2.2 of the "Iowa Antidegradation Implementation Procedure" as the situation described did not result in degradation.

5. Deleted the total residual chlorine language in Section 2.2 of the "Iowa Antidegradation Implementation Procedure" as an effective demonstration was not made that this activity would not significantly degrade water quality.

6. Revised the public and intergovernmental participation language in Section 4 of the "Iowa Antidegradation Implementation Procedure" to provide additional detail and clarity to public and intergovernmental participation process.

7. Added Section 6.5 of the "Iowa Antidegradation Implementation Procedure" to address the change in the approach to Clean Water Act regulated open lot confined animal feeding operations.

8. Revised Section 7 of the "Iowa Antidegradation Implementation Procedure" to reflect the appropriate intent for implementation.

9. Revised “Appendix B – Outstanding Iowa Waters” for lakes to remove Upper Gar Lake, Lower Gar Lake, Minnewashta Lake, and East Okoboji Lake as these lakes do not qualify as Outstanding Iowa Waters at this time.

Part 1: Original Notice of Intended Action (ARC 7368B)

General comments supporting the proposed rule

-The process outlined in the proposal makes it clear that water quality is a priority and it is the responsibility of all Iowans to prevent degradation of water that will affect downstream uses.
-All lakes, wetlands, waterways and streams need protection to the maximum extent.
-In about five years I will retire and leave Iowa with my small business. The reason is simple. For someone that loves water, be it lakes, rivers, or streams, Iowa is heartbreaking. I yearn for quality waters again and will move to some place that has them.
-Facilities would be required to obtain a review if they wish to increase the amount of pollution they already deposit into PUBLIC waterways.
-Don't let special interests weaken these rules!!!
-We need the strongest antidegradation policies. Period. As an Iowan made up of 60% water with only limited liver capacity, I am gravely concerned.
-Ideas from individual citizens should take precedence over pressure exerted by industry shills who, far too often, are shortsighted and motivated by profit rather than public good.
-My family and I would be happy to have DNR set powerful regulations that can keep Iowa's waterways from becoming MORE polluted than they currently are.
-I hope that the DNR and our Governor will make protection of our rivers, streams and lakes a top priority and adopt antidegradation rules that will insure that further degradation will not occur.
-I'm an Iowa voter writing in support of strong and broadly applicable antidegradation rules.
-As always, please do your job and bring meaningful anti-degradation rules to the EPC for approval.
-For the sake of my children and grandchildren I hope you will support the antidegradation notice.
-Polluters should bear the cost out of their profits, not taxpayers who should be able to enjoy clean water.
-Our society has degraded to such a level that our government agencies feel compelled to hold public hearing asking people whether they want their water resources protected or not. This is ridiculous. Please do everything possible to further protect our water.
-Do not waver -- protecting these streams is an ecological, economic and moral imperative.
-We support updating Iowa's Anti-Degradation Policy to be consistent with and compliant with the 1972 Clean Water Act. The current anti-degradation policy applies only to high quality and high quality resource waters.
-Antidegradation is required by federal law and it's past time for Iowa to comply with the Clean Water Act.
-All waters should be protected against new pollution that is not necessary to accommodate important economic or social development. Protecting Iowa's waters will not impede economic development as some have claimed, but rather enhance it since our

water will be cleaner for all to enjoy. Additionally, cleaner water leads to reduced costs to Iowa taxpayers
-Do not let poor decisions be made from pressure from big businesses.
-I am in favor of any regulation that protects our water in Iowa.
-The quality of our waters in Iowa has truly become shameful and a threat to all life here; we desperately need DNR help in cleaning our water.
-The antidegradation regulations for the Iowa great lakes seems to me to be just what the doctor ordered.
-We support the IDNR EPC notice of intended action for antidegradation
-We support the DNR EPC Notice of Intended Action to amend Chapter 61 "Water Quality Standards".
-I encourage the EPC to pass strong antidegradation policy.

General comments in opposition to the proposed rule

-The construction aggregates industry and others affected by this rule change would not be opposed to it if the rule was fair, based on sound science and common sense or had some benefits beside those which are "potential", "anticipated", or "may happen".
-What's next? That is my question. It amazed me somewhere along the line someone comes up with some wild idea and doesn't think what problems can occur after that. Hopefully you will nix this idea.
-As an ag producer, I am not in favor of more regulation until we enforce stricter rules on municipals that dump raw sewage directly into the river in certain situations. It's time we tighten the belt on cities, not ag.
-Please be sure any new regulations provide a clear path to improvement, not just another roadblock to human endeavors.
-I believe the proposed revisions result in a very complicated regulation that will be difficult to implement and difficult for regulated community to follow.
-I believe that the proposed policy as written will result in undo regulatory burden on our communities and businesses that are not necessary. Unnecessary requirements increase costs for these entities which will be passed onto the rate payers and consumers in the state.
- I am concerned about the overall impact on our economy and its overall cost.

General comments in support of OIW/ONRW and certain water bodies listed in the original Notice of Intended Action published November 19, 2008

-We strongly support the Tier 2.5 classification and the inclusion of the Outstanding Iowa Waters listed in Appendix B of the Draft AIP.
-I searched all over Minnesota and Wisconsin looking for another Okoboji and realized there is no other Okoboji.
-My son and his family moved back to Iowa from Colorado and NE Iowa's trout streams were a major factor in his decision. For me, these streams have resulted in a son, and two grandsons living here in Iowa near me.
-If every high-quality lake and stream were added to the Outstanding Iowa Waters list, accompanied by strong antidegradation rules, we would much rather go swim in an Iowa water instead of take a family vacation to Wisconsin or Minnesota.
-Tier 2.5 will maintain and protect outstanding state waters and prohibit all new pollution except in very limited circumstances. We believe at minimum the five lakes and 46 cold-water trout streams in Northeast Iowa currently listed in the proposed rule as Outstanding Iowa Waters (OIW) deserve to remain in the rule as OIWs. Outstanding Iowa Water should also include what are classified as High Quality Resource Waters and Protected Water Areas.
-Since the Iowa Great Lakes are a "national treasure," it is imperative that these lakes be classified as an Outstanding Iowa Water.
-Please do everything you can to ensure that Outstanding Iowa Waters are a part of the final rules.
-We support the OIW designation as included in the DNR proposed rules as it indicates Iowans value their highest quality waters. Do not let this classification and protection be eliminated from the rules.
-Please keep these waters safe from pollution.
-Please do not use the excuse that we are in bad economic times to put this off any longer.
-The classification of the lakes as OIW is so appropriate they are Iowa's best natural lakes and so important to the area for tourists.
-I urge you to do all that is necessary in order to see that our trout streams and other coldwater fisheries are included in Tier 2.5 or 3 designations in order to receive adequate protection.
-The list of Outstanding Iowa Waters must be protected at all costs.
-The OIW rules are designed for those who abuse and this will provide these streams and rivers with the protection that is needed.
-We support the creation of Tier 3 for Outstanding National Resource Waters, as it is required by the federal rule.
-We especially support the inclusion in these rules of a fourth tier of antidegradation protection (Tier 2.5) that offers additional protection from new pollution for Outstanding Iowa Waters (OIW). We also support the inclusion within these rules of a list of waters to receive the OIW designation that includes most of the waters designated as High Quality waters in Iowa's current water quality standards.

-I support the inclusion of a designation for Outstanding Iowa Waters (OIW) in the Iowa rules. This OIW designation reflects the value that Iowans place on Iowa's best waters, including West Lake Okoboji and 5 other natural lakes in Dickinson County; and 46 cold water trout streams in NE Iowa including French Creek, Waterloo Creek, and Sny Magill Creek. The designation of Outstanding Iowa Waters, while not federally required, is a classification Iowans want and to which we are entitled. Outstanding Iowa Waters need to be a part of the final rules.

General concerns regarding Tier 2.5 in the original Notice of Intended Action published November 19, 2008

-I do not support a classification of tier 2 1/2 at this time. I think that is a future endeavor for the state. Let's get into doing antidegradation under the revised policy and add tier 2 ½ at a later date when we fully recognize what that might mean.
-I am against populating Tier 2 ½ or Tier 3 waters in the same rulemaking as the Anti-degradation policy. Selecting and codifying Tier 2 ½ and Tier 3 waters should be a separate rule making action.
-Tier 2.5 will stop all economic development in a watershed where implemented.
-What are the scientific criteria used to determine which waters will go into Tier 2.5?
-We would like to see some softening of the rules as all the streams in our area will be affected.
-I'm a member of Sierra Club and a city leader. I cannot support OIW in its current form. It does not allow communities to grow. It seems we are being punished for doing a good job for a long time so these creeks are what they are today.
-Due process had not been delivered to date on these forty-five OIWs.
-If someone asks for a stream to be classified as Tier 2.5 or 3 only one of the eight requirements must be met.
-Any further limitations added to industry, wastewater discharges, and quarry operations will add additional tax burden to residents. In a way if the rules are proposed as written, we will be facing another unfunded state mandate. How will the State of Iowa compensate Allamakee County for this due to the majority of our county being in the OIW category?
-The rule will probably be an end to livestock in certain areas, while tourism and business take over.

DNR Response: See Part 2 regarding the amended NOIA published August 12, 2009 and Part 3 regarding the Regulatory Analysis of ARC 8038B for additional information.

Specific Issues

Issue: The "affordability or cost analysis" should also include the benefits of clean water to Iowan's and fish and wildlife.
- The balancing of a proposed polluting activity's importance must account for the enhanced and sustainable economic benefit arising from protection. Impacts to fishing and recreation are sizeable (and sometimes irreversible) costs of pollution. But "impacting fishing, recreation and tourism industries" can really hurt the gas stations, coffee shops, campgrounds, motels, bait shops, bars, and other commercial enterprises dependent on such recreation. On the flip side, the revenue realized from recreation – enhanced and expanded by protecting these waters and improving others – is new revenue that comes in year after year. It is sustainable revenue that does not require resource depletion or deconstruction in order to deliver economic benefit to the affected public.

DNR Response: Environmental benefits must be considered in the alternatives analysis process.

Issue: What is the benefit of these rules on water quality?
-The potential benefit of increased tourism to view these OIW and ONRW waters because of their "aesthetic conditions" is a bit hard to grasp. Does the IDNR expect cars full of eager visitors to roll into Iowa, filling our highways and byways with cars from border to border to view just to look at water?? Maybe so, but it is a bit hard to believe this will happen.

DNR Response: The anticipated benefits from the revised antidegradation policy and new implementation procedures are associated with the potential improvements to instream protections for aquatic and semiaquatic life, wildlife and livestock watering needs, and aesthetic conditions due to increased attention to researching treatment alternatives and preventing water quality degradation consistent with provisions listed in the AIP. The proposed implementation procedures require a systematic review of various options for treating a proposed discharge. Tier 2 ½ protection works to require potential dischargers to select a plan that affords a higher degree of protection than given to Tier 2 waters.

There may also be indirect marketing benefits associated with waters categorized Outstanding Iowa Waters (OIW). These benefits may be realized by increased tourism and use of these waters and other nonuse benefits such as Iowans simply knowing these resources are better protected and preserved for future generations.

See Part 3 of this responsiveness summary for additional discussion regarding benefits.

Issue: Environmental Protection Commission (EPC)/Legislature
-Since much of the language in this rule change has been directed by the Iowa Environmental Protection Commission, it would appear we may have an appointed body attempting to bypass the legislative process to "write law".
–this was done without following the procedure outlined in the rule change. They just did it because they said they could and again "on and on it goes". This rule should be evaluated and voted on by an elected body, not an appointed one!!
-This rule change, as currently written; its history before the EPC; and the decisions made regarding it by the EPC so far are the kind of things that help make voters and taxpayers cynical about the day-to-day operations of governmental bodies.
-We feel our legislators should be making policies not private groups.

DNR Response: Pursuant to 455B.173 of the Code of Iowa, the legislature has required the Environmental Protection Commission to adopt water quality standards in compliance with Chapter 455B and the federal Clean Water Act. These rules are intended to satisfy this mandatory duty.

Issue: General Cost Comments
-The proposed rules as currently written will prevent or seriously limit growth and economic recovery in some areas of the State, increase substantially the cost of discharge permits for those businesses and municipalities who hold them and has the potential to restrict existing businesses to the point of closure at a time when that is already occurring at a record pace.
-With the uncertain costs of this rule and uncertain alternatives for disposal, we feel this rule is a move in the wrong direction. Iowa wants to be considered as a friendly place to do business, both industrial and agricultural, this rule does not say that.
-Attempting to implement a rule which has the potential to hurt Iowa's economy at a time when OUR State and OUR Country are experiencing the largest financial downturn since the Great Depression is irresponsible at best.
-Regulated industries want to meet requirements, while ensuring it is practical and possible for communities, businesses and other members of the regulated community to comply. DNR's current proposal would make it difficult for the regulated community to comply with policy in an economical manner.
-As a regulated community trying to follow numerous changes in water quality standards, we are concerned the impact this will have on Iowa's economy and its citizens. Increased costs resulting from the policy will be passed on to the citizens of Iowa in the form of increased wastewater treatment rates and prices charged by businesses.

DNR Response: Please read department's October 27, 2008 fiscal impact statement on the proposed rule and subsequent regulatory analysis published in the Administrative Bulletin on October 21, 2009 for more information regarding the economic impacts of the proposed rule. Also, please review Part 3 of this summary for additional discussion of economic impacts.

Issue: Costs to Cities to install expensive treatment alternatives
-Our community may be required to implement expensive treatment alternatives to our wastewater treatment system which will force us to raise our rates even more than is already necessary to meet the state requirements.
-Without any restriction as to what the DNR can impose as to costs you could bankrupt many small communities or force them to unincorporate.
-There will be significant cost increases due to implementation of expensive treatment alternatives to wastewater treatment systems.

DNR Response: The implementation procedures provide limitations to the reach of the alternatives analysis. As discussed in the AIP, affordability of the least degrading alternative may be assessed at the applicant's discretion. This assessment may be used to determine if the alternative is too expensive to reasonably implement. This approach results in the selection of the least degrading alternative, while maintaining affordability to the public or private entity. If the applicant determines that the least degrading remaining alternative is affordable, then it is the preferred alternative. If it is not affordable, then the affordability of the next alternative should be evaluated until an alternative is chosen that is practicable, economically efficient and affordable. A demonstration that an alternative is not affordable should be clearly documented and should show that the alternative has a substantial adverse economic impact that would preclude the use of the alternative for the activity under review.

Issue: Cities should not be forced to invest money to support stream water quality goals that are idealistic and unrealistic.

DNR Response: The purpose of antidegradation is to preserve existing water quality to the extent practicable as required by the Clean Water Act. The department does not feel this objective unreasonable.

Issue: The cost analysis missed key factors
-The cost analysis does not include the costs of required technological upgrades, permit delays, or associated legal expenses.
-The cost of this rule is uncertain. Add on legal expenses, upgrades, permit delays and additional costs and most business gets stopped.

DNR Response: As discussed in the October 27, 2008 Fiscal Impact Statement, certain costs imposed on the permit applicant cannot be completely quantified at this time, and the fiscal analysis did not fully delineate these costs. These costs include, but are not limited to those associated with implementing additional technology beyond what is currently contemplated by existing rules and indirect costs related to inflation and loss of revenues caused by potential delays in permit issuance. The additional technology beyond what is currently contemplated by existing rules may be required if the alternative is practicable, economically efficient and affordable. This can result in higher costs for a facility in addition to the cost of performing the antidegradation

review if the alternative is more expensive than the base pollution control option to meet existing rules. It's not possible to determine how often this may occur in terms of providing an accurate fiscal impact estimate.

Even more complicated in attempting to predict whether if and how many alternatives analyses may result litigation. The implementation process the department intends to use was crafted to avoid implementation issues other states have experienced, including legal challenges. Therefore, the department does not expect to see the legal challenges at a frequency that would warrant concern.

Issue: Cost to agriculture

-I'm involved in livestock production and any additional cost to production, especially in these troubling economic times, puts an undue cost on my operation. Just the additional consultant costs are projected to be over $10,000 for this one action alone.

DNR Response: The additional consultant costs were derived in the October 27, 2008 Fiscal Impact Statement were for the expected typical situation of a municipality or industry needing to explore less degrading alternatives for wastewater treatment and proceed through the alternatives analysis process. For a livestock producer it is important to note that antidegradation policies only apply to Clean Water Act (CWA) regulated concentrated animal feeding operations (CAFOs) as defined in 567 IAC Chapter 65 Division II, which does not include most confinement feeding operations because they are specifically prohibited from discharging by state law (567 IAC Chapter 65).

The antidegradation requirements only apply to permits for new or expanded discharges. An expanded discharge from a CAFO includes adding more animals or increasing the size of the feeding areas or the areas that contain manure. When requesting a new or expanded discharge from a CWA regulated CAFO, an applicant must submit an antidegradation analysis however the analysis of less degrading alternatives is not required because CAFO NPDES permits are already required by Chapter 567 IAC 65 to implement controls on their discharge. The control requirements in Chapter 567 IAC 65 are identical to the controls required in 40 CFR 401.31 which are listed as the "best practical control technology currently available". The one requirement is that applicants must submit information in order to demonstrate that the degradation will accommodate important economic and social development. In summary, the costs are expected to be minimal for livestock producers as the only requirement is to justify whether the activity accommodates important economic and social development.

Issue: Discharges from CAFOs are temporary and limited

- Because the federal CAFO rule addresses the alternatives, livestock farms should not have to do an additional "alternatives analysis." Meeting the federal CAFO rule effluent standards should be deemed to meet the alternatives analysis requirement. The discharge from a new or growing CAFO can be classified either as not new or increased or

temporary and limited, or should be categorically exempted as a de minimus impact on the assimilative capacity of the stream during these high flow conditions. This rule should consider allowed storm water discharges from CAFOs under NPDES permits "temporary and limited." Such discharges can only occur during high stream flow conditions after a large precipitation event. Further, such conditions occur infrequently, irregularly and unpredictably compared with normal point sources and the frequency, volume and concentration cannot be reliably predicted for degradation review purposes. We ask the department to substantiate that the extent of a potential discharge as a de minimus impact on the assimilative capacity of a stream during or after a qualifying precipitation event. Kentucky provided for a categorical exclusion for CAFOs among other exemptions to the antidegradation analysis. Although a recent 6th Circuit Court of Appeals vacated and remanded the exemptions, the rationale of the court should be closely examined. The court acknowledged that an agency has the implied authority to exempt "when the burdens of regulation yield a gain of trivial or no value." The court *Kentucky Waterways Alliance v, Johnson,* 540 F.3d 466, 491-492 (6th Cir. 2008) examined whether the combination of the categorical exemptions would result in significant rather than de minimus exemptions. Because the EPA's decision document did not address the question, the court vacated and remanded the issue back to the agency. To satisfy the 6th Circuit court of appeals' standard for review of a categorical exemption, the state of Iowa should discuss the assimilative capacity loss estimates from an infrequent high flow event and explain why it is de minimus. Using EPA and NRCS's modeling procedures, the state should be able to demonstrate a de minimus impact for CAFOs. CAFOs are deemed to be point sources, but have nonpoint source characteristics. The implementation of the antidegradation policy for the roughly 200 CAFOs in Iowa should be clarified in the AIP. We respectfully suggest that infrequent precipitation induced runoff events from CAFOs be allowed to qualify not as a new or increased discharge, be categorized as a temporary and limited discharge or be categorically excluded from the analysis. If the department does not ultimately choose one of these options, we suggest that the economically achievable technology limits have already been established in the federal CAFO rule and should be deemed to satisfy the alternatives analysis for tier 2 pollutants in water bodies.
-Discharges from CAFOs should be considered temporary and limited.
-Meeting the federal CAFO rules should be deemed to meet the alternatives analysis requirement.

DNR Response: The department agrees that federal CAFO rule addresses the alternatives portion of the Tier 2 review, but not the importance test. This is why the proposed rule has been modified to include those provisions for regulated CAFOs.

Based on interpretation of recent case law, the department cannot categorize discharges from livestock farms as temporary and limited due to the fact that these facilities are permanently in place with the potential to discharge repeatedly. However, the department acknowledges that the likelihood of discharge is limited to the 25-year, 24-hour rain event. The question that remains is whether or not there is a significant impact to water quality when these discharges do occur. The low expected frequency of the discharges and the fact that they can only occur during very significant precipitation events supports the assumption that impacts will be low, but the

department can not make this determination until we have received or obtained actual data proving the impacts are limited. Until this occurs, the department cannot declare these discharges as temporary and limited.

See Recommendation #7.

Issue: General Confined Animal Feeding Operation (CAFO) applicability
-Agriculture should continue to be exempt as they are now under the federal rules. There are already enough rules and regulations to accomplice the goal of better water quality.
-It seems we are hostages of confinement "farms" in the name of progress. How can polluting the air we breathe and the water we drink be progress?
-Increased control and a change in the degree of protection and control pertaining to CAFO permits needs to be strongly considered.
-Are CAFOs and manure management plan permits subject to anti-degradation review?

DNR Response: Antidegradation provisions apply to CAFO permits to the extent where they are covered by the Clean Water Act (see previous responses).

Issue: How does the term "community" and "importance" apply for regulated CAFOs?
-The fear I have is that each case of improvements will be judged on economic and social importance. How will it be justified if a single farmer wants to improve his property and is denied but a business is allowed?
-The rule should recognize that one person can be "important"
-The term "community" is undefined in the rule. Small, rural businesses will rarely be able to meet the test if the "community" is defined as a large area and if the bar for "social and economic importance" is set high.

DNR Response: As discussed in the AIP in section 3.3, the affected community is considered as the community in the geographical area in which the waters are located. The affected community includes those living near the site of the proposed project as well as those in the community that are expected to directly or indirectly benefit from the project.

The department recognizes the social and economic importance of small family farming operations even if it provides income to only person.

Issue: Bacteria impairments and Tier 2.5
-Many OIWs are impaired for bacteria caused by rural septic systems and waste from wildlife, livestock grazing, geese and pets. Does it make sense to implement a rule which will hurt growth and economic recovery in an effort to attract more wildlife, geese and other animals to cause even more degradation?

DNR Response: The purpose of antidegradation is to preserve existing water quality to extent practicable as required by the Clean Water Act. The OIWs identified in the amended Notice of Intended Action were listed due to their outstanding chemical water quality or ecological significance.

Issue: Point vs. Non-point sources of water pollution

-The Iowa DNR points out the MAJORITY of pollution in Iowa's waters is caused by Non-Point Sources. Yet it is clear that POINT SOURCES are the target of this rule change and those who abide by the rules will pay the price by not being allowed to expand, grow or continue doing business.

-IDNR Water Bureau Staff is on record as saying that "if all point sources were stopped from discharging, it would not make any difference in water quality in Iowa". We again ask, if this is the case what is the point of the rule and the way it is written?

-Where is the equity in the rule for non-point sources?

-Why aren't nonpoint sources affected?

-Even though we think clean water is a laudable goal, it should not tried to be done on the backs of old people and young families by concentrating on the 10% of pollution contributed by point source; when the same technology is employed by agriculture which contributes 90% of the pollution.

-It's time to require the agricultural community to pay its share of the clean-up. If livestock producers wish to use industrial confinements, which produce sewage instead of manure, we should apply the same standards to the wastewater from those confinement operations as we do to municipal/industrial wastewater treatment facilities. We should require them to build a treatment facility, just as we impose that requirement on Iowa communities. If producers of livestock "sewage" don't want this regulation, they should adopt sustainable models of agriculture that return manure to the land as fertilizer, rather than convert it to a toxic waste. Whatever the source, "sewage" pollutes our waters, kills aquatic organisms, affects the health of our citizens, and impacts the quality of life. Those who produce sewage – whether cities, or industries, or industrial confinements – should follow the same environmental rules. Until this happens, it is our position to resist any further regulations being put on point source dischargers; including these anti-degradation regulations.

-Agricultural non-point source pollution will continue to be unregulated and unenforceable without approval of the antidegradation rules. The ag industry will be largely unaffected by these rules.

-Why should a small town have to have exceptional costs when I as a farmer with a whole bunch of cows can let the cattle go in the middle of the river and crap there, do whatever they want to do.

DNR Response: It is important to note that these rules revise the current antidegradation policy and create antidegradation implementation procedures for the State of Iowa that are consistent with the minimum requirements of the federal Clean Water Act. It is also consistent with the policy of the EPC to protect and enhance the quality of all waters of the state by attempting to prevent and abate pollution of all

waters to the fullest extent possible consistent with statutory and technological limitations for all point and nonpoint sources of pollution.

The water quality standards define the water quality goals for a water body by designating the use or uses to be made of the water, by setting criteria necessary to protect those uses, and by protecting existing water quality through antidegradation provisions. Iowa adopts water quality standards to protect public health or welfare, enhance the quality of the water, and serve the purposes of the Clean Water Act. The proposed rules do not affect the current approach for nonpoint source pollution or existing programs. Instead, it revises aspects of Iowa's water quality standards. These standards apply to the waters in Iowa and not to a specific source of pollution. Water quality standards are applicable to nonpoint sources of pollution despite the fact that there may be few direct implementation mechanisms for nonpoint sources.

The Department agrees that the many water quality issues come from the watershed and not from wastewater treatment plant outfall pipes. However, regardless of the source of pollution, it is necessary to establish water quality standards that are consistent with the goals and intentions of the CWA. The fact that rivers and streams may already contain pollution from other sources does not obviate the responsibility or requirements for a regulated facility to comply with provisions in the Water Quality Standards.

Nonpoint source pollution remains a significant problem. The CWA's enforceable provisions are directed at discharges from point sources - regulating the discharge of pollutants to surface waters from pipes, outlets, and other discrete conveyances. In contrast to this enforcement approach, nonpoint source water pollution - polluted runoff - is addressed primarily through non-regulatory means under the CWA. Water pollution from nonpoint sources remains a substantial contributor to the impairment of waters across the nation, especially in Iowa. Various approaches have been used to control such pollution, including assistance to states from federal planning and grant programs under the Clean Water Act (e.g., 33 U.S.C. §§ 1288, 1329). Common strategies at the state level include watershed and land use planning, development of voluntary best management practices (BMPs), technical assistance programs, cost-sharing for implementation of prevention and control measures, and some enforceable mechanisms, including regulation in the absence of any direct federal requirement or mandate.

Put simply, EPA has not established an enforceable program for regulating nonpoint sources. The decision whether to control nonpoint source pollution and in what manner is left entirely up to the State under the Clean Water Act.

The state is and has been working hard towards finding and implementing better ways to control nonpoint sources of pollution. The standards simply define and set the appropriate water quality goals and protections for Iowa's water resources independent of the current regulatory framework of water quality programs that implement the water quality standards.

Issue: Specific water body nominations
-I would like to nominate Nicholson Creek (aka Plato Creek) and an Unnamed Creek that empties into the Cedar River in Cedar County (Eden Hall).
-I would like to see Silver Lake as an Outstanding Iowa Water.
-South Pine Creek, Bloody Run Creek, and Bankston Creek should be OIWs (Trout Unlimited).
-In addition, the Turkey River should be added.
-Outstanding Iowa Water should also include what are classified as High Quality Resource Waters and Protected Water Areas.
-I would like to nominate the Yellow and Turkey River as Outstanding Iowa Waters.
-We believe Big Spirit, East Okoboji, West Okoboji, Lower Gar, Minnewashta, and Upper Gar Lake should be Outstanding Iowa Waters. In addition, West Lake Okoboji should qualify as a National Outstanding Water (Okoboji Protective Assc.)
-West Lake Okoboji should qualify as a National Outstanding Water (Pheasants Forever)
-French Creek, North Bear, South Bear, South Pine and Waterloo Creeks should be Outstanding Iowa Waters.
-It's with dismay that I find neither Deer Creek here in Tama County, nor the nationally renowned endangered Iowa River included on the DNR proposed list regarding those where further degradation should not be allowed.
-The Iowa Great Lakes should be moved from Tier 2.5 to Tier 3 because of its unique Lakes, Wetlands, Wildlife Refuges, and Public Hunting Areas.
-West Lake Okoboji should be an ONRW.
-Center Lake should be an OIW.

DNR Response: The department will accept nominations for Outstanding Iowa Waters and Outstanding National Resource Waters consistent with the nomination requirements listed Section 1.3 of the AIP once the rule has become effective in state administrative code.

Issue: Dalton Lake as an OIW
-The proposed designation of Dalton Lake should be reconsidered. It is the feeling of the Jackson County Conservation Board that this site should not be included in the OIW's designation.
-After review of information on Dalton Lake in Jackson County, and discussion with the Jackson County Conservation Board, we believe that this water should not be included on the final list of Outstanding Iowa Waters. We understand that Dalton Lake is a one-acre pond in an old limestone quarry that is stocked seasonally with trout. While this pond is a great recreational resource, it is not a natural feature and does not have any ecological importance for the state. In our opinion, this water does not meet the criteria for an Outstanding Iowa Water.

DNR Response: The department has proposed to remove Dalton Lake in the amended Notice of Intended Action published on August 12, 2009.

Issue: Turtle Creek as an OIW
-Turtle Creek in Mitchell Co. has not been appropriately vetted through the OIW nomination process listed in the AIP.

DNR Response: The stream segments listed in the amended Notice of Intended Action published on August 12, 2009 have been appropriately vetted. As a result, Turtle Creek has been removed from this initial OIW listing effort.

Issue: Tier 2.5 is not federally required
-The CWA and the EPA do not require Iowa to list any Tier 2.5 waters.

DNR Response: Please see the response for "Issue: This is not required by federal law" in Part 3 of this responsiveness summary.

Issue: Quarry operations in Tier 2.5 watersheds will be effectively put out of business.
-As noted in the IDNR's Fiscal Impact Statement, quarries will be impacted by the OIW and ONRW classification

DNR Response: The department is only aware of three quarries in Tier 2.5 watersheds. An existing discharger can continue to operate as outlined in their current NPDES permit with no additional restrictions. See Part 3 of this responsiveness summary for more information.

Issue: Quarry Exemption
-We respectfully request the DNR grant an exemption from the antidegradation review for quarry water discharge as there will be a net decrease in the pollutant loading for each parameter of concern or the DNR should create a de minimus exception for quarry dewatering.
-Any discharge into a stream which contains concentrations less than the allowable concentration or TMDL should be permitted as the end result is a dilution factor.
-Quarry operations should be exempt from antideg review.
-There are no nitrates produced in quarrying. The nitrates come from farm runoff into our quarries.
-Varying levels of pollutants are inherent in groundwater throughout the state and we can not control the water we receive. It is not sensible to require us to make right a condition we did not make wrong. As a means to remedy this shortcoming in the rule I would propose that conditions within the regulations allow for this form of source water to be discharged as it is unlikely to have been impacted by site operations or conditions. In general our discharges serve to maintain or enhance the value, quality, and quantity of surface waters and contribute to meet designated use attainability.

-I hope that limestone processing is not the deal breaker when we have much worse contributions to the degradation of our streams.
-DNR is unlawfully categorically banning new or expanded discharges to impaired waters – Tier I Review. Available provisions in current federal law and court cases for instances where discharges into impaired waters should be allowable under our anti-degradation policy.

DNR Response: See "Issue: TMDL requirements and Antidegradation" in Part 1 and "Issue: Quarry Dewatering in OIW" and "Issue: Tier 1, TMDL, and antidegradation" in Part 3 of this responsiveness summary for more information.

Issue: Quarry operations and OIW
-OIW will cause rock to have to be hauled in for projects since quarrying activities will be prohibited.
-Anytime one of our quarries runs out of reserves it will not be able to move and open up a new quarry
-Quarries will be forbidden to discharge one molecule of nitrate.
-Antideg could potentially shut down an existing quarry that needs to expand its discharge of pit dewatering or as existing quarries exhaust their reserves, replacement quarries could be prevented from being developed.

DNR Response: See "Issue: Quarry Dewatering in OIW" and "Issue: No consideration was given to the environmental impacts of requiring longer transportation routes for raw materials for construction and maintenance projects" in Part 3 of this responsiveness summary for more information.

Issue: The DNR should conduct a mock alternatives analyses
-I suggest IDNR conduct an alternatives analysis study to demonstrate more clearly what is needed, what is acceptable, and who would qualify to carry out the analysis. As the effort and resources required to perform that analysis should be approximately the same whether the study is hypothetical or not I suggest the study address a real world situation. This exercise could serve to resolve many of the questions regarding the requirements and additionally aid in resolving a real issue affecting some population in the state.
-DNR should provide examples of typical antideg review scenarios and conclusions.
-Are there any mock alternatives analyses available?

DNR Response: The department is actively working on mock alternatives analysis to provide a better understanding of antidegradation and its processes. These should be available in the near future.

Issue: What constituents of nitrogen should be sampled for antidegradation purposes?

-In the water quality standards, nitrogen is listed in the forms of nitrate, nitrate + nitrite and total nitrogen. For the purposes of providing information to show that pit dewatering does not degrade water quality, but actually provides a benefit to the resource, my question to you is what constituents of nitrogen should be sampled for in order to match those that would be expected to come up as a result of the proposed antidegradation rule? Really, my question boils down to whether or not we need to be analyzing for nitrates as a stand alone result, or would the tests for TKN and nitrate + nitrite be sufficient?

DNR Response: The antidegradation rule defines pollutants of concern for antidegradation reviews to include those pollutants which are reasonably expected to be present in the discharge and may reasonably expected to affect the beneficial uses. Therefore, if the discharge could potentially impact a drinking water use downstream, it needs to meet the drinking water criterion for nitrate nitrogen, and nitrate + nitrite nitrogen of 10 mg/l as the criteria defined in IAC 61. However, if the pit dewatering discharge has no potential to affect drinking water uses, nitrate nitrogen monitoring is not required. In addition, if the discharge potentially contains ammonia nitrogen, it could impact downstream aquatic life uses. Thus, ammonia nitrogen is a pollutant of concern for aquatic life protection and its monitoring is required. Even though the current water quality standard does not have a numerical criterion for total nitrogen (TN), the narrative general criteria defined in IAC 61.3(2) are to be met by any point source discharges. Thus, if the pit dewatering contains TN levels and could potentially impact downstream narrative standard, TN monitoring is required. TN includes the following: TKN + nitrate + nitrite.

Issue: The Antidegradation Implementation Procedure will not go through rule making procedures required by state law

-Many times it is the DNR policy to reference a document by its title and date, and only go through official rulemaking if the date or title on the document happens to change. If this is the case, there will be no notice, nor any opportunity for public evaluation of the proposed changes. So, the original question remains. But, I would answer that this process is unconstitutional, in so far as it is a violation of due process standards of specificity and notice. The Iowa DNR and Environmental Protection Commission are likewise unelected bodies, and we must demand the Implementation Procedures be subjected to public comment and notice.

-We would encourage the DNR to put the implementation procedure into rule language.

-Changes to the AIP will not need rule making in the future and could be changed at any point by anyone who wishes to do so.

DNR Response: The AIP is a rule-referenced document and any substantive change must proceed through the state rule making process including public participation provisions as required by Administrative Procedures Act.

Issue: Mass loading instead of concentration to determine degradation
-Under a strict mass loading concept, we could not even discharge potable well water because it contains naturally occurring pollutants of concern. This defies common sense and existing case law!
-criteria based on concentration of pollutants of concern rather than mass loading could potentially allow certain discharges to even Tier 3 segments without adversely affecting the waterway.
-Mass loading is contradictory to the WQS, it should be concentration only. A discharge which contains concentrations of any pollutant less than the permitted amounts into any the water body classes actually results in a dilution effect thereby improving the quality of the water body.
-Mass loading is a problem as most measures of water quality use concentration.
-We believe that in order to manage a problem you must first be able to measure it. The concept of mass loading does not allow for a means to measure or effectively and reasonably manage the resource.

DNR Response: Using a mass loading and concentration approach provides several benefits. Mass loading is especially important for bioaccumulative pollutants such as mercury that could cause potential for human health concerns. Additionally, the AIP was crafted to avoid implementation issues other states have experienced, including legal challenges. One of the main purposes of this process was to perform the alternatives analysis process in an expeditious fashion which benefits both applicant and the state. Using mass loading removes the need for legally contentious de-minimus exemptions, prevents costly implementation of determination of existing water quality, and prevents the need for the state to keep detailed records of how and when assimilative capacity was utilized in every discharge situation.

However, the department recognizes the conservative nature in which degradation is identified thus requiring alternatives analyses (i.e., a new loading of a pollutant of concern triggers Tier 2 review). As a result, it is expected the nature of the degradation be discussed in any alternatives analyses so the department and public are fully aware of what exactly is being proposed and its potential effects on water quality. The nature of the degradation may have an impact on public interest in any regulated activity that may result in degradation.

Issue: "Permanent net increase…after mixing" wording in the AIP is ambiguous
-the phrase "permanent net increase…after mixing" is likewise ambiguous. How does one define "permanent" in a fluid situation such as streams that have different flow rates and concentration levels depending on rainfall, hydrology, and water management?

DNR Response: The term "permanent" has been removed to provide more clarity.

Issue: What happens when discharge points are changed?
-Quarries may also be prohibited from discharging due to mere changes in the timing and location of discharge points. Often times as quarries mature over the years, discharge points change. Or, existing quarry reserves are exhausted and a "new" quarry opens adjacent to or near the old one.

DNR Response: If the outfall location were to change to an area that had not been previously discharged to by that outfall, then it can be considered a new source of degradation thus requiring a Tier 2 review. For example, switching the outfall location from one stream to entirely different stream. Generally speaking, if the current outfall location were to move to a location downstream of the current outfall location, then the arrangement would not be considered degradation as the stream segment in question has been receiving this discharge previously.

Issue: How are periodic discharges from quarries handled?
-Many smaller quarries operate on a seasonal or yearly basis, and not necessarily every year. Pumping or discharging of water only occurs during this production period, and therefore a discharge permit may not always be required. As I understand it, these situations have sometimes been viewed by the DNR as requiring a new permit or a modification to an existing permit, which under the proposal would require antidegradation review.

DNR Response: If the quarry was permitted at a point in time, then temporarily closed, later reopened and the outfall locations remained the same and the facility did not expand its operations based on the provisions of the previous permit, then this would not be subject to an antidegradation review.

Issue: TMDL requirements and Antidegradation
-To get a new NPDES permit or modify an existing permit under a TMDL for nitrates, for example, the permittee must show there are no nitrates in its discharge water. According to the DNR, "not one molecule" of nitrate will be allowed. Since nitrates are already present in Iowa's groundwater, it will be impossible to get a new permit without removing the nitrates from the water. This will be cost prohibitive to an individual producer.
-DNR is unlawfully categorically banning new or expanded discharges to impaired waters – Tier 1 review. It is inappropriate and unnecessary for DNR to adopt a load freeze regarding any pollutant discharged from an expanded facility. As previously discussed, there are certain unique situations (Hg air inputs, or nutrients from non-point sources) where the proposed new or expanded discharge is such a small or negligible amount of the overall impairment that the applicant should not be denied an expansion simply because the parameter is at low levels in its effluent. In these unique situations it is illogical and unproductive to categorically prohibit expansion. The Supreme Court expressly stated that no such categorical ban should be read into the CWA and the DNR's AIP should reflect this decision.

DNR Response: A proposed new or expanded discharge of a pollutant of concern into a water body that is impaired for the pollutant of concern in question would be prohibited under the requirements of the TMDL and NPDES permit. This situation is recognized in the AIP in section 1.2 that states "Tier 1 review shall prohibit degradation that may cause or contribute to the impairment of a beneficial use. If the discharge is prohibited, then it would be prohibited even if the antidegradation provisions did not exist.

Issue: How does this fit in the water quality standards?
-The Tier 1, 2, 2.5, 3 proposal is another layer without correlation to the already existing Class A-C, H system. What are the standards for a Tier 2 stream? How does a Tier 2 stream fit with the Class A-C system?

DNR Response: The antidegradation rule is one of three required regulatory elements of the WQS. The other two elements include beneficial uses, and water quality criteria (narrative and numeric). The "Class A-C, H system" specifically represents beneficial uses and the water quality criteria establishes the minimum levels of quality not be exceeded to protect those uses. Antidegradation is related to how the department will determine, on a case-by-case basis, whether and to what extent, existing water quality may be lowered in a surface water while, at a minimum, not exceeding the levels of quality to protect the uses of that surface water as established through the beneficial uses and corresponding water quality criteria.

Issue: Intergovernmental Coordination Implementation and vague public notice requirements
-It is not clear who will be responsible for intergovernmental coordination and more clarity is needed for public notice.
-If the existing process for notice and public comment remains in the rule implementation document, it should be made clear the notice will be deemed sufficient when published in the manner prescribed, even if it does not completely overlap with the "affected community."
-Anti-degradation determination/permitting process needs to be clear and timely. Notifications, appeals, and authority needs to be fully and clearly defined. Process should be unbiased and recognize equal standing of all parties.

DNR Response: In conjunction with the public comment period, intergovernmental coordination is required by the applicant prior to approving a regulated activity that would degrade a surface water of the state. The public notice language has been revised to address these concerns and provide additional clarity.

See Recommendation #6.

Issue: Definition of "pollutant of concern"

-The definition of "pollutant of concern" should be tied to existing Iowa numeric water quality criteria. Stating that "pollutants reasonably expected to be present in the discharge" will be covered leaves the door open to prevent any discharge to waters. Iowa's regulations currently have criteria for pollutants and monitoring requirements for those said pollutants.

-DNR should clarify targeted "pollutants of concern". The definition is so broad and undefined that they provide little or no useful framework for guiding or restricting the scope of analyses. We presume DNR intends to consider the concentration of the pollutant present and evaluate whether the pollutant present and evaluate whether the pollutant level approached concentrations that could be environmentally significant. However, this position is not explained in the draft AIP.

-Applicants cannot be expected to conduct antideg analyses on parameters that have only narrative criteria and no established guidance on how to translate the narrative criteria into a numeric value.

-The definition of "pollutant of concern" should be clarified as follows: For purposes of this section, "pollutants of concern" for antidegradation reviews shall include only those pollutants (1) for which specific numeric water quality criteria are established or where an EPA-approved implementation methodology has been developed for narrative criteria application, and (2) that are reasonably expected to be present in the discharge at al level that could negatively affect the beneficial uses of the receiving water.

-The only pollutants which should be considered are those for which standards are established. In addition, we should demonstrate that the pollutant exists rather than the nebulous term that is included.

-The DNR has failed to provide a clear definition of "pollutant of concern" allowing the DNR to regulate parameters that have not been identified. The proposed antidegradation rules include both tier 1 and 2 which will include review procedures on a pollutant by pollutant basis. All "pollutants of concern" will be evaluated in this review process without a clear definition of what a "pollutant of concern" is. If Iowa businesses and industries are going to be regulated, at the very least they should be aware of which pollutants they need to monitor.

-We express our support for the inclusion of all pollutants of concern, as defined by the Antidegradation Implementation Procedure as "those pollutants which are reasonably expected to be present in the discharge and may reasonably [be] expected to affect the beneficial uses," not just those pollutants for which Iowa has numeric criteria.

-Targeted "pollutants of concern" should be clarified. The proposed language is overly broad and vague. Clarifications should be made that 'pollutants of concern' do not mean trace metals incidental to wastewaters, unregulated pollutants that do not have numerical requirements, whole effluent toxicity, nutrients such as nitrogen and phosphorus due to no numerical requirements. Anti-degradation review should focus on currently regulated parameters only.

-Not only is this definition and resulting scope of the rule unreasonable, arbitrary and capricious, but it also unnecessarily subjects the permitting process and small businesses

to substantial risk of litigation over which pollutants should be considered for an antidegradation analysis and permit limits. We acknowledge that EPA Region 7 and some interest groups have encouraged the department to regulate nutrients without having scientific justification for a numeric standard. Ultimately, if statistically and scientifically valid numeric standards are developed, the rule would apply to nutrients. We respectfully ask the department to reconsider this vague definition and narrow the definition to only include pollutants for which there are numeric or narrative criteria.
-DNR's statement regarding the need to assess pollutants that have no numeric standards is quite problematic. The whole effluent toxicity (WET) test, currently required of WWTFs, are the regulatory means to make sure otherwise unregulated pollutants aren't causing a detrimental effect to Iowa's waters. We know of no other state program that focuses on unregulated pollutants under its antideg review. The draft AIP opens the door for requiring such assessments. The policy needs to clarify the parameters that are not subject to further antideg review.
-These rules need to apply to all pollutants that could harm Iowa waters including pollutants such as nitrogen and phosphorus.
-The definition of "pollutant of concern" should be tied to numeric criteria.
-Review should focus on currently regulated parameters. The DNR should make it more clear that the antideg review won't apply to pollutants that are not reasonably expected to affected beneficial uses associated with the stream and that this "expected to affect" demonstration is to be made by the department. An increase in pollutants loadings should only trigger an antidegradation review when such loadings are expected to have some type of significant detrimental effect to existing water quality. For this reason, most States focus on the parameters already regulated in the permit, and do not enforce requirements related to trace contaminants or total nitrogen present in all municipal wastewater.
-Wastewater treatment facilities are subject to a wide-array of "pass-through" pollutants (Cu from pipes, Zn from public water treatment, trace levels of metals and organics, disinfection byproducts, very small amounts of PCBs and mercury, etc.). While many of these pollutants have numeric WQS, DNR has not limited any of the parameters because the discharge does not "cause or contribute" to WQS exceedances. If a WWTF wishes to expand, the loadings of these, currently unregulated, pollutants will almost certainly increase. DNR needs to explain that if a pollutant is below the level that would trigger a concern regarding standards compliance and therefore is not subject to any effluent limitation requirement in an existing permit, the parameter will not be subject to further antidegradation review.

DNR Response: The proposed antidegradation protections apply to new or expanded discharges of any "Pollutant of Concern". Pollutants of concern for antidegradation reviews include only those pollutants which are reasonably expected to be present in the discharge and may reasonably be expected to negatively affect the beneficial uses of the receiving water.

The determination of whether a pollutant is reasonably expected to negatively affect the beneficial use of a receiving water is a fact question. For pollutants that have been currently assigned a numeric standard, the identification and the pollutant is

established by law. It is important to understand that the entire point of Tier 2 antidegradation is to maintain existing water quality in water bodies in which the numeric water quality standard is already being met. Therefore the existence of a numeric standard is only relevant to identify the pollutant, not to set any maximum limit for purposes of antidegradation review. For pollutants that do not have a current numeric standard, the Department would have the burden to prove that such pollutant will negatively affect the beneficial uses of the receiving water.

To the extent a pollutant without an existing numeric standard will affect a beneficial use; the Clean Water Act requires the state's antidegradation policy to address the pollutant. One comment stated "At some ratio of concentrations and stream conditions, nutrients may occur at a level which may affect a beneficial use." Yet Iowa does not have current numeric standards for nutrients. Therefore, the acknowledgement that nutrients can impact uses is also an acknowledgement that the state can not maintain and protect the level of water quality necessary to protect existing uses if the antidegradation policy categorically excludes pollutants without numeric standards. A determination that a pollutant, such as nutrients, is a pollutant of concern results in a review of less degrading options to new or increased discharges of this pollutant. It does not necessarily result in additional pollution controls for the pollutant. This determination is made only after a review of the available alternatives.

The proposed antidegradation protections properly place the burden on the Department to prove that an individual pollutant will negatively affect the beneficial uses of a receiving water.

Issue: Economic efficiency and best management practices
-When reviewing the economic efficiency of alternatives, we would suggest adding a provision for the use of Best Management Practices (BMPs). Several times industries have similar situations that could be used for other new or expanding facilities. This would help streamline the process and make it more efficient for the IDNR and applicable facility.

DNR Response: The department recognizes that BMPs are an important part of new or expanding industrial facility projects and are encouraged to be included in the alternatives analysis.

Issue: How does the importance test work?
-When would a project be deemed "not important"?

DNR Response: See Part 3," Issue: **Please clarify how the Department intends to determine the "importance" of social and economic development when conducting a Tier 2 review".**

Issue: Permit Delays & DNR Review Process

-IDNR does not plan to add any staff when the antideg rules are implemented and has stated that the process is only anticipated to add about a month to NPDES permitting times. We are concerned that NPDES permits will be delayed much more than month because of the potential for significant public comment on controversial discharges and the time required for INDR to review and comment on the alternatives analyses documents. The applicant will likely be required to revise and resubmit alternatives analysis studies to address IDNR comments; requiring another delay to wait for IDNR to review the revised document. This whole process is unlikely to be completed in one month. Particularly with a new discharge, additional delays beyond the current schedule of 6 – 12 months are problematic. When a company is trying to obtain permits to startup a new facility, they need a predictable timeframe that is as short as possible.

-We are concerned that there are no clear guidelines on how IDNR will review and approve the alternatives analysis documents. Without clear guidance, an applicant has no way to determine whether the alternatives analysis will be acceptable and the permit will be issued. If an industry is evaluating locations for a new facility, the feasibility and timing of required permits can be an important factor in decision making, By introducing this uncertainty, as well as the uncertainty associated with opening the process to public comment, companies may decide to locate in other states.

-The public comment period should be conducted by the department, not the applicant.

-Facilities should not be required to respond to comments on the rules, and it should be clear the facility has the discretion to take these suggestions into account or not, in its alternatives analysis process.

-The DNR should be responsible for the intergovernmental coordination and review process, not the facility. The DNR should conduct this in concert with the required public notice and comment period for the facility, and submit the comments to the facility upon close of the public comment period, for consideration prior to the close of the alternatives analysis. The DNR routinely performs this process and can complete it much more efficiently than each individual applicant. That burden would be much greater when placed on an entity not familiar with this process or equipped to complete it.

DNR Response: The AIP lays out clear guidance detailing the expectations of an alternatives analyses document. In addition, the timing of the alternatives analyses in the process the department intends to use was crafted to avoid implementation issues other states have experienced, including legal challenges. One of the main purposes of this process was to perform the alternatives analysis process in an expeditious fashion which benefits both applicant and the department. Through this process which includes having the alternatives analysis and public comment period at the onset, it is the department's expectation that alternative analysis will be received that are thorough, meet the requirements established in the AIP, account for public comments, and are therefore acceptable upon submittal to the department. The department will be providing mock alternatives analyses in the near future for interested parties as a tool they can use to help craft acceptable alternatives analysis.

Issue: Credit should be given to previous improvement projects
-The DNR should devise a way, perhaps in the alternatives analysis, to account for those facilities that have installed significant improvements prior to the adoption of the rule and to focus the antideg review on the water quality in existence prior to these improvements. A good example of this would be the level of trace metals in the effluent, as reflected in the amounts metals present in sludge. Because of pretreatment and other technological improvements made by facilities, effluent levels of these metals have been dropping for years. However, if a facility proposed an expansion today, mass loading of these metals would be expected to increase slightly. This slight increase in metals, however, should not constitute an antidegradation concern as the actual water quality will still be better than historical conditions. Other states have recognized this example, and have allowed expansions to occur because these facilities have already implemented measures to improve effluent quality in recent years.
-Anti-degradation needs to be based on a set point in time which we believe is appropriately when Iowa first adopted the existing anti-degradation policy. Improvements prior to that point in time, however, should be credited.
-It would not make any sense to respect the current permitted loads in terms of triggering the review but then completely disregard those same permitted loads when establishing a starting point for determining whether degradation is occurring. Where the permittee has already undertaken actions that resulted in improved water quality, the antideg rule must account for those activities and not result in an imposition of more restrictive requirements.

DNR Response: If a facility intends to discharge more pollutants requiring an increase in their permitted levels, then this will require an alternatives analysis. A facility may account for improvements that have taken place prior to the adoption of this rule to help explain actions taken on a particular pollutant of concern.

Issue: DNR needs to establish a de minimus exception
-DNR needs to establish a "significance threshold" or a "de minimus exception" in the AIP.
-While the department initially rejected including a de minimus exemption from the rule, we ask the department to reconsider its position. Many federal courts have upheld a de minimus exemption from the antidegradation analysis. This type of exemption in Iowa would help to reduce the burden of this rule on small business and is worth consideration.
-Will the DNR allow for de minimus arguments to be made if the assimilative capacity can be shown to not degrade the stream?
-We believe that DNR's antidegradation policy should be modified to contain an insignificance cut-off ('de minimus' exception) that is supported by EPA guidance and practice. In so doing, DNR can preserve the limited fiscal resources of dischargers for improvements and upgrades which will produce a significant environmental benefit.
-I believe that DNR's antidegradation policy should be modified to contain an insignificance cut-off ('de minimus' exception) that is supported by EPA guidance and practice. In so doing, DNR can preserve the limited fiscal resources of dischargers for improvements and upgrades which will produce a significant environmental benefit.

DNR Response: As discussed above in the response to "Issue: Mass loading instead of concentration to determine degradation" the department believes the benefits of not having a "de minimus" exemption outweigh the negatives. As mentioned, the severity of the degradation will be a key factor in any alternatives analyses submitted to the department.

Issue: Nutrients as a pollutant of concern
-If nitrogen is identified as a pollutant of concern under the proposed AIP, new or expanding WWTF's will be forced to install extremely expensive denitrification technology producing little to no environmental benefit. The need for regulation of this parameter should be expressly reserved to any EPA TMDL process. Please provide clarification regarding nitrogen and antideg reviews.

DNR Response: Nutrients will be considered a pollutant of concern for any new or expanding discharge where nutrients are a common pollutant, such as a municipal wastewater treatment plant. This means applicants will be required to review treatment alternatives for nutrient removal consistent with the provisions in the AIP. This review does not necessarily mean wastewater treatment facilities will be forced to install nutrient removal equipment. If the alternatives are not practicable, economically efficient, or affordable as defined in the AIP, then that would preclude the use of these alternatives. It should also be noted there are not active requirements for nutrient removal from technology based limits or water quality based limits at this time.

Issue: The definition of "alternatives analysis"
-The definition should include the words "cost effective." Part of the analysis should be of the potential cost of the different alternatives. Elimination of those words is problematic.

DNR Response: Section 3.2 provides a clear outline regarding the cost effectiveness of any alternative.

Issue: Clarification of "minimum level of pollution control"
-The definition of "minimum level of pollution control" should be clarified as follows: Controls required to protect existing uses and to achieve the highest statutory and regulatory requirements <u>for the segment(s) under evaluation</u>. The addition of these words eliminates any confusion that this could apply to the entire water body.

DNR Response: The department feels the current definition is clear and accurately encompasses the potential scope of antidegradation which covers Iowa's surface waters including lakes.

Issue: Definition of "community"

-The DNR has failed to provide a clear definition for the word "community" in order to determine if a proposed degrading discharge would be socially or economically important. If after the antidegradation review, the DNR finds that the new or expanded discharge will degrade water quality, the new or expanded discharge will only be allowed if the applicant can show important social and economic benefits to the community, however "community" is not defined anywhere within either the proposed rules or the implementation procedure. Obviously, social and economic importance will be drastically different if the community is defined as the rural community in which the facility is located or if community is defined as the county in which the facility is located. We ask that DNR define "community" so that Iowa businesses can begin to collect necessary information to show that their facility provides a social and economic benefit to the community.

-The term "affected community" is used as the basis for the social and economic analysis. It is described as "the geographical area in which the waters are located," but it then mentions that the affected community should include not only those living near the site but also those "in the community" that are expected to directly or indirectly benefit from the project. Attempting to use both the geography and the direct and indirect impacts to define the community creates unclear criteria for determining this important aspect of antidegradation review. This also impacts the ability of the facility to ensure it has given adequate notice. This is particularly true in the case of a rural water district whose customer base may span a large geographical area but its treatment plant and the related discharge is outside the watershed in which those customers reside.

DNR Response: As discussed in the AIP in section 3.3, the affected community is considered as the community in the geographical area in which the waters are located. The affected community includes those living near the site of the proposed project as well as those in the community that are expected to directly or indirectly benefit from the project.

Issue: Downstream impacts of OIW

-The implementation of the proposed Tier 2 ½ could have unintended far reaching effects, because there is no clear language in the implementation document explaining how far upstream from an OIW a discharger will be considered to be discharging into an OIW. In fact, language suggests reviews will extend into more than one segment. *"The review must extend downgradient as far as degradation could occur regardless of the classification status of the receiving waters."* This uncertainty could draw in entire streams or rivers into the OIW purview.

DNR Response: See Part 3, "Issue: The analysis fails to clearly designate how OIW watersheds will be treated in the proposed rule" for more information.

Issue: Tier 2 as the presumed level of protection
-We oppose the inclusion of the sentence, "Where waters have not been listed as impaired or as an OIW or ONRW, the presumed antidegradation protection level is Tier 2 for all pollutants of concern." We disagree that the presumed level of protection should be Tier 2. This sentence is in direct conflict with the definition of a Tier 1 protection. In addition, this sentence assumes a higher level of protection for most for the majority of water bodies not included on the 303(d) list. That list, by Iowa law, is limited to only those waters for which credible, scientific data supports listing. We recommend that the presumed level of protection for all unlisted waters and for all waters of the state be Tier 1 until those waters are listed based on scientific data at which point, further protections may be warranted.

DNR Response: The level of protection afforded a water body determines the type of antidegradation review required when new or expanded discharges are proposed. Because the Tier 1 and 2 reviews are conducted on a pollutant-by-pollutant basis, these reviews as a review of a "pollutant" as opposed to a review of the overall quality of a "water body." For example, where a perennial surface water is impaired for one or more pollutants, and where existing water quality for other parameters is better than water quality standards, the surface water will be afforded both Tier 1 and Tier 2 protection on a pollutant-by-pollutant basis. That is, Tier 1 protection is afforded for the pollutants that are at or violating water quality standards and both Tier 1 and Tier 2 protection is afforded for pollutants for which water quality is better than the water quality standards. Where waters have not been listed as impaired on the §303d list or as an OIW and ONRW, the presumed antidegradation protection level is Tier 2 for all pollutants of concern. In the absence of information on existing water quality, waters shall automatically receive Tier 2 review prior to allowing any additional pollutants of concern that might result in a degradation of the water quality.

Presuming Tier 2 makes the antidegradation policy simpler. Determining existing water quality is an administrative and economic burden for facilities and the likely result will be that an alternatives analysis is needed in nearly all situations. This approach results in savings for both facilities and the state by performing the alternatives analysis to determine if degradation is necessary and avoids complicated implementations issue such as establishing existing water quality and tracking a water body's available assimilative capacity.

Issue: The procedure for evaluating the potential cost of an alternative treatment method should include the community or dischargers debt load, property tax rate and the relative poverty/income level of the residents of the community.

DNR Response: Following an analysis of practicability and economic efficiency, the affordability of the least degrading alternative may be assessed at the applicant's discretion. This assessment may be used to determine if the alternative is too expensive to reasonably implement. This can include the factors the commenter described.

Issue: Tier 2 ½ is vague and more stringent than federal requirements.
-We are against Tier 2 1/2. The current proposed Tier 2 ½ is vague and is based on the premise that we will "know a tier 2 ½ water when we see it'. Adding this plank to our Anti-degradation policy is overly stringent and more stringent than what federal anti-degradation laws require.
-The inclusion of the endangered species criterion should be limited to the actual presence of endangered species. The "*any other factors the Department considers relevant*…" criterion is too ambiguous, and should be removed from the list of criteria.
-In determining if the nominated water should be considered an Outstanding Iowa Water, the DNR is directed to consider a variety of parameters, but there are no scientific requirements for listing a stream as an Outstanding Iowa Water and listing them is solely up to the discretion of DNR staff on a stream by stream basis.
-Since the OIW did not go through the process listed in the AIP I ask that all OIW designations be removed from this rule making
-We are against populating Tier 2 ½ or Tier 3 waters in the same rulemaking as the Anti-degradation policy. Selecting and codifying Tier 2 ½ and Tier 3 waters should be a separate rule making action.
-The DNR has failed to explain the science or support for designating 45 streams as tier 2 ½ and what makes those streams Outstanding Iowa Waters. In one foul swoop at an EPC meeting, 45 waters were added to the tier 2 ½ list without any scientific justification for listing them as such.
-Although the document states the burden is on the nominating party to establish the basis for classifying a surface water as an OIW or ONRW, we question whether the burden to show social and economic impact of a Tier 2 ½ or Tier 3 designation, will fall on the affected discharging community. With an open nomination process, this could place a heavy burden on cities concerned with how this new nomination might restrict growth. In addition, the proposed implementation document contains no criteria or threshold for showing sufficient "social and economic impact" to prevent such a listing.
-The guidance for the OIW nomination process outlines eight conditions but requires only one of those conditions be met. Listing as an OIW should be reserved for only those that at a minimum, are perennial streams in a free-flowing condition that have "pristine water quality."
-It isn't clear how Iowa waters become either OIW and ONRW. The current language seems to make it easy to be categorized as an OIW water. Because of the significant consequences of the OIW & ONRW categories, more guidance needs to be provided on this point and the rules must ensure that only waters that are truly exceptional maybe considered for this category of protection.

DNR Response: The stream segments listed as OIW in the original Notice of Intended Action published November 19 ,2009 were later amended in the Notice of Intended Action published on August 12, 2009 after a detailed review. The OIW criteria have been bolstered in final AIP. See Part 3, "Issue: OIWs must be vetted", "Issue: This is not required by federal law", and "Issue: Why implement this?" for more information.

Issue: DNR should emphasize the "more harm than good" exception contained in the practicability section of the alternatives evaluation
-If the anticipated environmental benefits of treatment options are than the ancillary environmentally harmful impacts associated with the options, the alternative should immediately be ruled out as impracticable. The current language states that these should be considered, but does not definitely state how to weigh these factors or what to do in the "more harm than good" situation.
-If possible alternatives are expected to pose significant financial costs on dischargers (i.e., reverse osmosis or denitrification) with negligible environmental benefit they should also be deemed impracticable because of the economic inefficiency. The AIP outlines this portion of the analysis but should more clearly emphasize the manner in which analysis applies.

DNR Response: The department feels the current language in the AIP that discusses economic impracticality, secondary environmental impacts and other practicability factors is adequate. These factors, if applicable to a specific situation, can be discussed in the alternatives analysis and during the public comment process to help select appropriate alternatives.

Issue: Do we really know if Makee Manor will or will not need to expand?

DNR Response: Makee Manor is not expected to be required to upgrade its facilities due to its history of low influent loading to the treatment plant and low inflow and infiltration due to its small collection system. The current treatment plant, though built in 1981, is still serviceable to meet its treatment needs and there is no indication that this facility will be expanding its operations. If it does expand its operations, there still may be enough capacity in the design of the existing treatment plant to accommodate any expansion without being considered degradation.

Issue: Public hearing times and locations
-My concern here is the public hearings on happening on Wednesday around Christmas. Not everyone can make it these hearings.

DNR Response: The Administrative Procedures Act requires only the "opportunity for oral presentation" which can be granted if a petition is signed by 25 persons. The department scheduled thirteen public hearings without any petitions being submitted. These hearings were at varying times of the day to attempt to accommodate as many special needs as the department could. We will continue to be as accommodating as possible in future rule making efforts.

Issue: The rule inappropriately mentions that "regulatory requirements must be imposed through modification of statutes or rules outside of the antidegradation review."
-We suggest that references to future unknown legislative action should be removed from the implementation guidance.
-The AIP states "regulatory requirements must be imposed through modification of statutes or rules outside of the antidegradation review." It is inappropriate for the DNR to address legislative matters in this way; any mention of what the DNR believes the legislature should do regulate nonpoint discharge sources should be removed from the implementation procedure.

DNR Response: Section 8 of the AIP addresses implementation of controls for non-point sources which states "Nonpoint discharges do not currently require a permit pursuant to these federal provision or Iowa law. States may adopt regulatory programs to address nonpoint sources of pollution. Unless Iowa imposes a regulatory framework upon nonpoint sources of water pollution there is no mechanism available for the imposition of antidegradation review in regard to these discharges and such review can not occur". This language does not constitute the department position in regard to the regulation of nonpoint sources of pollution. The language is intended to clarify the scope and role of the antidegradation policy in regard to non-point source activities that can adversely affect water quality.

Issue: Vague wording in the AIP for social and economic importance
-Vague wording in the AIP for social and economic importance can be defined in multiple ways. This leaves businesses, cities, and farmers open to whatever definition the ruling party wants to use. There should be specific definitions in the rules.

DNR Response: The AIP outlines the three steps needed to demonstrate the socio-economic importance and defines key terms.

Issue: Tier 2.5 is actually Tier 3
-We are opposed to both the inclusion of a tier 2½ and populating the list with waters for Iowa. The inclusion of a tier 2½ has the effect of making it easier to qualify for equivalent restrictions to a tier 3. Reducing the eligibility criteria for a tier 3 equivalent and designating it as tier 2½ in order to impose these additional restrictions is not acceptable.

DNR Response: See Part 3 of this responsiveness summary for more information

Issue: Agricultural storm water discharges and ag irrigation return flows should be exempt from antidegradation analysis.
-agricultural storm water discharges and agricultural irrigation return flows are exempt from federal permitting requirements and should be specifically exempted from the antidegradation policy implementation requirements.

DNR Response: The proposed antidegradation rule does not contradict the exemption from regulation provided by the Clean Water Act for agricultural storm water runoff and does not propose additional best management practice controls for agricultural practices beyond those controls established by other provisions of the Code of Iowa and the Iowa Administrative Code.

The department feels this formal response adequately addresses the concern and does not propose to specifically include activities where antidegradation provisions do not apply since regulated activities are already defined in the AIP.

Issue: Scope of the rule
-It is our position that the department does not have authority to implement the antidegradation policy in waters that are not navigable waters of the United States.
-The department's use of "designated waters" in a previous draft, while not perfectly implementing the statute, was closer to the scope of legal authority authorized by § 455B.173. We ask that the scope of the implementation of the rule be narrowed to that which is authorized by statute for navigable waters of the United States.
-We disagree with the statement excluding general use waters because we strongly believe that many intermittent general use segments of Iowa's waters can support viable aquatic life and children's recreation during periods in which they are flowing. By excluding these waters from Tier 2 antidegradation requirements the Department is neglecting protections these waters deserve. We request that the Department remove the exclusion of general use waters from Tier 2 protections.
-DNR must state more clearly how it intends to treat intermittent streams. How will an antideg review work on such waters.
-"Beneficial uses" should focus on surface waters of the U.S., not surface waters of the state. The federal Clean Water Act only applies to surface waters of the United States.
-Anti-degradation policy shall only apply to perennial waters of the state. Anti-degradation policy shall not apply to ephemeral and intermittent streams or to waters designated as general use waters. Anti-degradation policy can be invoked if discharges into said waters degrade perennial receiving waters.
-We respectfully request IDNR to modify the draft AIP to remove the categorical exemption for general use waters and confirm that it will apply Tier 2 antidegradation protections to all waters of the state that have water quality that "exceeds levels necessary to support fish, shellfish, wildlife and recreation in and on the water."
-Remove the exclusion for general use waters. This exclusion leaves a large percentage of Iowa's stream miles, stream miles that are open to use, without Tier 2 antidegradation protection. If this is justified by claiming that general use waters "cannot" support fishable and swimmable uses, this is absurd, particularly if impairments to the resource

that have diminished its uses are a result of the nearly 30 years of sub-compliant regulation in Iowa. Many general use streams are capable of supporting viable communities of aquatic life as well as child's play and other forms of recreation. Therefore, these water deserve Tier 2 protections under the plain language of 40 C.F.R. § 131.12(a)(2) as these waters should not be presumed to lack quality that "exceeds levels necessary to support fish, shellfish, wildlife and recreation in and on the water."

DNR Response: Some comments alleged the following:

1. The proposed antidegradation rules and implementation procedure extend the antidegradation protections beyond the jurisdictional scope of the Clean Water Act; and
2. The Department may only implement antidegradation protections for waters under the jurisdiction of the federal Clean Water Act.

The Department denies both of these assertions. The first issue is the extent of Clean Water Act jurisdiction in regard to Iowa waters. The controlling case is Rapanos v. United States, 547 U.S. 715 (2006). Two tests arose from this case.

The plurality in that case found that "waters of the United States" means relatively permanent, standing or continuously flowing bodies of water "forming geographic features" that are described in ordinary parlance as "streams[,] ... oceans, rivers, [and] lakes." The phrase does not include channels through which water flows intermittently or ephemerally, or channels that periodically provide drainage for rainfall.

Justice Kennedy devised a separate standard in his concurring opinion. His standard depends upon a determination that a "significant nexus" exists between the water and a water that is navigable in the traditional sense. A water has the requisite significant nexus if the water, either alone or in combination with similarly situated lands in the region, significantly affects the chemical, physical, and biological integrity of other covered waters more readily understood as "navigable." When, in contrast, a water's effects on water quality in the navigable water are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term "navigable waters."

Because Justice Kennedy's concurrence was determinative of the case, his standard is generally viewed as the controlling standard. Additionally, most commentators view the Kennedy standard as being broader in scope.

The Department's proposed antidegradation protections apply to all surface waters of the state except intermittent watercourses and those watercourses which typically flow only for short periods of time following precipitation and whose channels are normally above the water table. Such intermittent watercourses do not support a viable aquatic community during low flow and do not maintain pooled conditions during periods of no flow.

The Department specifically chose this language for defining the scope of the antidegradation protections in an effort to align this policy with the previously approved application of the "rebuttable presumption" through rule 567 IAC 61.3(1). It was agreed by the Department, U.S. EPA, and the regulated community that the "rebuttable presumption" applies only to jurisdictional waters. Rule 567 IAC 61.3(1) establishes the definitions of "general use segments" and "designated use segments". Designated use segments are intended to be waters that are subject to Clean Water Act jurisdiction.

The rebuttable presumption applies to waters shown as perennial on the specific U.S. Geological Survey map referenced in rule 61.3(1) "b" and to other intermittent streams with perennial pools until such time as a use attainability analysis makes a determination that the water body does not fit the applicable definitions. Such perennial waters satisfy both tests as set forth in Rapanos.

Some of the comments did not object to the use of the term "designated waters" to define the extent of the antidegradation protections but objected to the use of the underlying definition. The Department has chosen to use the underlying definitions for clarity and to avoid circumstances in which a stream segment is subject to the rebuttable presumption and has not yet been redesignated after completion of a use attainability analysis. The antidegradation protections should apply when a stream segment actually meets the definition of a "designated water" under Iowa law. Similarly, a proposed new or expanded discharge should not be subject to antidegradation procedures if a use attainability analysis shows that the stream is a nonjurisdictional water but has not yet been recategorized through the use attainability analysis process. It is important to note that the issue is whether the discharge impacts a covered water, not necessarily whether the stream receiving the discharge meets the definition of a covered water. Antidegradation will apply if a downstream water qualifies and will be impacted.

The proposed antidegradation protections are not intended to exceed the jurisdictional authority of the Clean Water Act and the Department does not believe they exceed such authority.

However, the Department believes the these comments rely upon an overly restrictive reading of section 455B.173(2) of the Code of Iowa. Section 455B.173(2) relates only to the establishment of effluent standards. The Department does not consider the proposed antidegradation protections to constitute an effluent standard for purposes of application of section 455B.173(2). Regardless, the proposed protections are designed to conform to the jurisdictional limits of the Clean Water Act.

See Recommendation #1.

Issue: 401 waivers
- Because this rule will have an impact on small businesses, the rule should provide the department with the opportunity to grant a waiver from the rule. Specifically, section 404 of the Clean Water Act allows the state to waive the requirement for a section 401 certification if it determines the section 404 permit process adequately protects navigable waters of the U.S. In a 2006, 6th Circuit court of appeals decision, the court allowed the state of Ohio to waive the requirement for an antidegradation analysis. The court also said that the EPA could not prohibit the state from issuing the 401 certification waiver. We ask the department to include a waiver provision specifically for the antidegradation provision of the section 401 certification.

DNR Response: The department feels the final 401/404 language drafted in the AIP appropriately addresses the implementation of 404 permits and 401 certifications.

Issue: CAFOs should be prohibited from locating in Iowa Great Lakes watershed

DNR Response: Antidegradation policies only apply to Clean Water Act (CWA) regulated concentrated animal feeding operations (CAFOs) as defined in 567 IAC Chapter 65 Division II, which does not include most confinement feeding operations because they are specifically prohibited from discharging by state law (567 IAC Chapter 65). Discharges from CWA regulated CAFOs that are considered to result in degradation are prohibited in the drainage areas of OIWs. A non-discharging CAFO would be allowed in OIW watersheds.

Issue: Senate Study Bill
-I understand that the Iowa legislature is currently considering a study bill that will omit certain measures in the state's antidegradation rules; I'm writing because I do not want those omissions to become a reality.
-Please see to it that current rules are not weakened, and, in fact, please consider the major role that nitrogen and phosphorus play in polluting Iowa's waterways and contributing to hypoxia in the Gulf of Mexico.

DNR Response: The department will continue to work with the legislature to ensure that Iowa law complies with the provisions required by the Clean Water Act.

Issue: DNR needs to change its rules before allowing land application
-Because the DNR is proposing land application of wwtp effluent as one of the option for meeting the new proposed anti-degradation rules, because there is only one community in Iowa currently using land application as a disposal regime, because the rules on the books now concerning land application of effluent from wwtp's are draconian in nature, because there are more regulations to follow and it is more expensive to land apply rather than discharge to a receiving stream, I would hope that the Department looks at updating those rules bringing them more in line with what communities might be able to afford if they

need to pursue that option. The DNR might want to take a comprehensive look at how many wwtp's could possibly use this particular alternative before recommending this as a serious option.

DNR Response: Land application is commonly viewed as a non-degrading treatment option due to the avoidance of a direct discharge. The department understands that this option may not always be the least cost or a competitive alternative due to costs and design limitations. However, land application systems should be explored, including options where a portion of the overall flow that a wastewater facility treats is land applied. The department has plans to update its rules and design standards to keep up with the changes being experienced in wastewater technology. Design proposals may consider variations to the requirements of current design standards for land application as may be supported by specific information and rational documentation. The details of a land application standard or proposal must be based on good science and environmental protection.

Issue: Failure to provide protection results in people recreating in other states
-Iowa's failure to maintain stream protections equivalent to Wisconsin and Minnesota is resulting in an increasing number of fisherpeople, including Iowa residents, to forgo Iowa licenses for those of neighboring states.
-While anti-degradation designations for Iowa's trout streams will not solve this problem on its own, it is a required first step to attracting this investment to Iowa. We are confident that with such protections we could begin the process of bringing Iowa's federal investments to levels comparable to those of Wisconsin and Minnesota. If $1,000,000 could be attracted annually for just ten years, the resulting recurring economic impact could be more than $100 million – annually – at the end of the decade
-The failure to grant permanent water quality protections to Iowa's trout streams is resulting in the loss of more than one million dollars per year in potential Federal habitat restoration assistance, and the resulting tens of millions of dollars in tourism that follows such an investment.

DNR Response: See Part 3 of this responsiveness summary for additional discussion regarding the benefits of this rule and the department's response.

Issue: New or increased discharges of pollutants should not be allowed where they will harm the biological integrity of the receiving waters.
-No state permits or approvals should be granted for pollution discharges or other pollution-causing projects unless it is clear, after study of the receiving stream by state biologists, that the new pollution will not kill or injure fish or other wildlife, or further degrade the waterway.

DNR Response: Iowa's surface waters are and always have been protected by Tier 1 protection. Tier 1 review prohibits degradation that may cause or contribute to the

impairment of a beneficial use or violation of water quality criteria. Tier 1 protection applies to all surface waters, regardless of the existing water quality. Additionally, this rule will begin to implement Tier 2 protections for Iowa's surface waters. Tier 2 protection applies on a pollutant-by-pollutant basis to all surface waters where existing water quality is better than applicable water quality standards as determined on a pollutant-by-pollutant basis. Tier 2 review shall prohibit the degradation of water quality of a surface water unless a review of reasonable alternatives and social and economic considerations justifies the degradation in accordance with the procedures presented in this document.

Issue: Nominations for OIWs and ONRWs

-The final rules should allow Iowans to petition the DNR for placing water resources on the Outstanding Iowa Waters and Outstanding National Resource Waters lists, impose reasonable designation requirements, and then require that those waters be protected. Should the DNR decide not to place Iowa's trout streams under anti-degradation protections at the outset, any nomination process implemented must allow a process for nominations to be open to anyone. This process must also allow for statewide input and feedback, even on local streams. The waters of the State of Iowa belong to all residents, not solely the residents of neighboring communities, and the DNR's charter requires them to protect the statewide interest. The input of local communities should carry no more weight than that of any other resident in the protection of these resources, and any system implemented should respect these interests.

DNR Response: The final rules adequately address these concerns.

Issue: The alternatives analyses should be more robust and limiting.

-Any system implemented must require sound, provable, and incontrovertible evidence of economic harm and the inability to implement workable standards before protections are waived. No arbitrary economic limits or constraints should be placed required technologies, and such technologies should only be waived if it can be proved that the resulting cost is more than the overall increase in burden on taxpayers *statewide* from the resulting pollution, not just locally. These costs should also be weighed against watershed-wide investments that have already been made, and the effect any discharge could have in reducing the value of that investment.

-We strongly encourage DNR to implement regulations that comply with EPA guidance requiring a heavy burden of proof on applicants who seek to eliminate alternatives on the grounds of expense

- The Alternatives Analysis must be rigorous, favor the least degrading alternative available, and account for the effectiveness of an alternative in controlling pollution

-The alternatives analysis should not be an invitation to circumvent and debilitate the enforcement objectives of the CWA. In this regard, the alternatives analysis should start from the premise that the least degrading alternative available is the preferred alternative

DNR Response: The department feels scope and requirements of the alternatives analysis are appropriate as drafted in the final AIP.

Issue: Sny Magill development

-Applications from industries and municipalities for new wastewater discharge pollution permits (NPDES permits) and for permits to conduct activities that may degrade water quality, including storm water permits for construction sites and permits from the Army Corp of Engineers for the filling or alteration of wetlands, must be required to do an anti-degradation review. Iowa's waters, despite substantial effort, are not seeing substantial improvement. As was seen recently in the case of development near Sny Magill in Clayton County, a single non-conforming development project can ruin years of watershed-wide restoration work.

DNR Response: Antidegradation applies in the situations described by the commenter. The department is aware of the situation described regarding Sny Magill and feels the antidegradation policy can help prevent that type of water quality degradation from happening.

Issue: Companies should be required to provide job estimates as a part of the importance test.

-No new pollution should be allowed until it is shown that it is truly necessary for important economic or social development. If a company claims that new pollution is necessary to have a new factory that will provide jobs, the company should at least be required to estimate what jobs it will provide and what it would cost to avoid the new pollution. We can then see what is being "saved" and "gained" by allowing new pollution in our waters.

DNR Response: The department agrees this information would be useful in alternatives analysis.

Issue: Backsliding

-Pollutant loading increases allowed under scientifically justified changes to water quality standards changes shall not be considered backsliding and shall not be subject to anti-degradation review during implementation.

-There is a need for an exclusion to be able to adjust discharge limits if additional data becomes available to document that a less stringent standard can be applied without increasing potential harm to the environment.

-Toxicity data is often based on limited studies and information that may not adequately represent actual conditions. This may result in more stringent than necessary effluent limits. The current regulations do not appear to allow effluent limitations to be increased if new science shows that the original limits were set too low as the result of faulty or inaccurate information. A specific example of this relates to the new limitations being issued for copper. There is significant controversy regarding the current water quality

standards for copper. We believe that it is likely that the copper standard will be increased in the future as better information is available. Under the proposed rules, it appears that dischargers will have no way of increasing stringent copper limits from their permits even if future studies show that their original limit was set too low due to faulty or inaccurate scientific data.
-NPDES effluent limits for wastewater dischargers are not always determined based on the best possible scientific basis. In some cases, sufficient scientific studies haven't been completed for specific pollutants, so limits must be based on the limited scientific data that is available. In other cases, very conservative assumptions are made in calculating effluent limitations in the absence of field studies. Field data isn't generally collected due several reasons: 1) the cost; 2) often times the discharger is unaware of the potential benefits; and/or 3) the discharger can meet the proposed discharge permit limitations even though the limits may be more stringent than necessary.
-effluent limitations are not always established based on the best scientific basis. Historically, the WQS have allowed for adjustments to be made as better and more accurate information becomes available. It is unreasonable to penalize a discharger because their current limits were established based on imperfect scientific data. As better information becomes available, appropriate corrections should be allowed to be made to the discharger's permit without the need to go through the Tier 2 or higher procedures. Correcting limits on the basis of new and improved scientific data should be added to the listing of regulated activities that are not considered to result in degradation listed in Part 2.2.

DNR Response: If water quality standards changes resulted in less stringent water quality based permit limits for the same parameter, then the facility would be expected to comply with the more stringent water quality based permit limits or meet one of the anti-backsliding exceptions in either Section 402(o)(2) or Section 303(d)(4) of the CWA <u>and</u> undergo a Tier 2 review to allow the less stringent permit limits

Issue: Flow variable limits
-Anti-degradation policy shall recognize and permit flow variable discharges that properly take into account the increased assimilative capacity of the waters at higher flows.

DNR Response: The antidegradation policy does not prohibit flow variable limits. Antidegradation is intended to protect the existing water quality to the extent possible at all stream flow conditions. Thus, if any proposed flow variable limits result in increased loading in excess of current permit limits then a Tier 2 review would be required.

Issue: How far downstream does an antidegradation review need to consider?
-DNR should be more specific on how far downstream it expects an antidegradation review to consider impacts. Proposed language has potential to require extensive downstream analysis into downstream states and stream systems which is unreasonable.

-The DNR should specify how far downstream it expects an antidegradation review to consider impacts. Antideg is not intended to address complex, basin-wide TMDL concerns. Communities cannot be expected to prepare complex nutrient models to assess significance of otherwise minor nutrient loadings to state waters. DNR should clarify that the scope of the review does not extend that far.
-DNR should be more specific on how far downstream it expects an antidegradation review to consider impacts. Proposed language has potential to require extensive downstream analysis into downstream states and stream systems which is unreasonable.

DNR Response: An antidegradation review shall be performed for the entire segment (or multiple segments) of a water body that could be degraded by a new or expanded discharge. The review may extend into more than one designated segment depending on the pollutant load within the discharge and the distance to and assimilative capacity of waters down gradient of the discharge point. The review must extend down gradient as far as degradation could occur regardless of the classification status of the receiving waters. If the potential degradation is confined within a single segment, the review may be limited to only the portion of the segment to be affected. In general, the department anticipates the overwhelming majority of review to be conducted on the first designated water body expected to be impacted by the proposed degradation.

Issue: Economic Guidance
-The "Interim Economic Guidance for Water Quality Standards" is not appropriate guidance for the 'Affordability Analysis. The particular criteria was established for a different issue and is not appropriate for this policy.
-The "Interim Economic Guidance for WQS" is not appropriate guidance for the affordability analysis. The guidance was to be used to determine if the "substantial and widespread economic impacts" would occur in support of removing designated uses under 40 CFR 131.10(g).

DNR Response: The AIP does not limit how affordability can be determined. It states, "This guidance document presents one set of public and private sector approaches. This interim guidance is not binding and may be replaced or supplemented with other methods of analysis, if sufficiently justified."

Issue: Setting an upper limit on affordability
-We object to the 115% threshold test as to whether increased wastewater treatment is "affordable" for T2 waters. The EPA position setting a 115% of base cost as a minimum, that is, assumed to be affordable to the community or industry, is being used by the DNR to set an arbitrary upper limit on affordability without any actual evaluation of what the community or industry can actually afford.
-We oppose using the 115% threshold for what will be considered economically feasible. We recommend using a 110% of the cost of base pollution control measures as a maximum.

-We express our support for the use of a nonbinding guidance of 115% of base cost of pollution control rather than an arbitrary percentage of the base cost as a cap in the evaluation of reasonable and feasible alternatives for the purpose of the Tier 2 review
-the 115% guideline used for the evaluation of "economic efficiency" include not only the cost of the alternative, but also a comparison of the pollution control benefits that it delivers. The Draft AIP is fundamentally flawed if DNR is simply considering the cost of an alternative and not its cost-effectiveness. The vagueness in this evaluation, aside from the arbitrary 115% guideline, should be addressed with additional detail on what constitutes "disproportionate" cost or "substantial improvement" in water quality
-Setting an arbitrary cost threshold considers only project costs and ignores the water quality improvement that could be achieved by implementing a less-degrading alternative. To be effective and fair, the Iowa DNR must have the authority to consider what is appropriate in each unique situation with the objective of clean water in mind

DNR Response: The 115% threshold is used to determine economic efficiency a particular alternative. A separate affordability analysis may be used to determine if the alternative is too expensive to reasonably implement. This approach results in the selection of the least degrading alternative, while maintaining affordability to the public or private entity. If the applicant determines that the least degrading remaining alternative is affordable, then it is the preferred alternative. If it is not affordable, then the affordability of the next alternative should be evaluated until an alternative is chosen that is practicable, economically efficient and affordable. A demonstration that an alternative is not affordable should be clearly documented and should show that the alternative has a substantial adverse economic impact that would preclude the use of the alternative for the activity under review.

Also the AIP states "Alternatives greater than 115 percent of the base costs should also be considered if implementation of the alternative would produce a substantial improvement in the resulting discharge. Conditions that might warrant consideration of alternatives of greater cost (above 115 percent) are the effectiveness, reliability, and environmental factors identified above....since all alternatives analyses use qualitative and quantitative assessments of water quality benefits and treatment costs and feasibility, best professional judgment is of the utmost importance when evaluating alternatives".

Issue: OIW and watersheds
-We agree that projects affecting tier 2.5 or tier 3 waters should be given individual attention by the Department. We would like to see this site specific permit requirement expanded to the watershed area in close proximity to these water bodies if the proposed activity may affect the quality of the tier 2.5 or Tier 3 water.

DNR Response: Individual permits will be required for regulated activities in the watershed area of Tier 2.5 or Tier 3 waters, as appropriate.

Issue: Definition of Regulated Activity
-the draft AIP defines "regulated activity" more narrowly to include only activities that require a permit or water quality certification pursuant to federal law. *In order to make the AIP consistent with federal guidance and to preserve the state's authority to apply antidegradation protections to certain state-regulated activities, we recommend the following edits to the definition of "regulated activity" in the AIP:*

Regulated activity: includes any activity that requires a permit or a water quality certification pursuant to state law or federal law, including: ~~the following federal laws:~~ 1) CWA § 402 NPDES permits, 2) CWA § 404 dredge and fill permits, 3) any activity requiring a CWA § 401 certification.

DNR Response: The regulated activities identified in the draft AIP are the only known activities where antidegradation can apply. The department is not aware of any other activity that specifies that Iowa's water quality standards are applicable. If in the future new activities are identified, then the department will amend the AIP to reflect the change.

Issue: Please clarify how Iowa's antidegradation policy will be implemented for facilities that apply for a permit prior to the effective date of the proposed implementation procedures.
-The federal antidegradation policy at 40 C.F.R. § 131.12 has been in place for many years. The fact that Iowa is in the process of developing specific procedures to implement this policy does not excuse compliance with the policy itself. There are at least two ways the Department could ensure that state waters receive antidegradation protections in the period before the new implementation procedures become effective. First, the Department could simply refrain from issuing permits authorizing new or expanded pollutant loadings until the implementation procedures are final and a full antidegradation review can be performed. Alternatively, the applicant and the Department could choose to perform an antidegradation review that looks similar to the review outlined in the draft procedures and then issue the permit. What is most important is that the Department not issue permits without any antidegradation review, thereby potentially giving away all of what the antidegradation policy is intended to protect before the policy can take effect.
-IDNR's removal of the explicit exemption for facilities that apply for a permit prior to the effective date of the new implementation procedures implies that Iowa will apply the new procedures to all regulated activities moving forward, regardless of the date that applications were received. However, because it is not entirely clear how the Department intends to proceed, we request that the Department confirm how it intends to cover such activities for the record.

DNR Response: The notice of intended action states "f. All unapproved facility plans for new or expanded construction permits, except for construction permits issued for nondischarging facilities, shall undergo an antidegradation review if degradation is likely in the receiving water or downstream waters following the effective date of the "Iowa Antidegradation Implementation Procedure."" This language was included to

address the situation where projects are rushed forward in an effort to avoid having to comply with the new procedures once effective in state rules.

Between now and when the rules become final; the NPDES section is actively implementing the current antidegradation policy in rule. The current policy is based on a water body by water body approach and as is being actively implemented at this time. New or expanded discharges to these waters are not being authorized.

It is not appropriate to apply new water quality restrictions or rules, when they haven't been legally adopted as identified in Administrative Procedures Act and approved by the EPA. While some regulated activities may be allowed degrade waters that are not specifically identified in the current antidegradation policy, this does not "give away" all that antidegradation is intended to protect. Under the new rules that use a conservative approach to identifying degradation, it is likely that these activities from the same sources will need to proceed through a Tier 2 review in the future to accommodate any additional degradation. For example, a new industrial contributor to a municipal wastewater treatment plant may be approved today, but any proposed increase in production that results in degradation for that industrial contributor or a proposed expansion by the municipality after the effective date of rules, will be subject to the new procedures.

Also, it is critical to understand that the final rules are currently planned to be presented to the EPC at their December meeting potentially making the rule effective on February 17, 2010. This a relatively short period of time that issue may be applicable.

Issue: Please clarify how Iowa's antidegradation policy will be implemented for facilities that apply for a permit renewal with effluent limitations that were never determined to be "necessary."

-Existing Water Quality must be based on, at a minimum, permitted loads. When determining existing water quality, the Department must account for permitted loads, and not just the actual loads at the time of the antidegradation review which may reflect greatly improved water quality in comparison to historical and authorized future conditions. It would not make any sense to respect the current permitted loads in terms of triggering the review but then completely disregard those same permitted loads when establishing a starting point for determining whether degradation is occurring. The Implementation Procedure is currently unclear on that issue and needs to be clarified.
-The DNR needs to do a streamlined or subset T2 review for facilities that received less stringent ammonia limits in 2001.
-I believe we need to have a regulation that prevents further deterioration of our water quality but I do not support using anti-degradation as a means to continually ratchet down discharge limits.
-Anti-degradation policy shall not extend to treatment plant performance benchmarking. Past treatment performance shall not create a de facto discharge standard that then limits

the ability of discharger from receiving new wastes that increase pollutants discharged to stream as long as pollutants are within NPDES permit limits.
-We strongly agree that the antidegradation rule and implementation document should not be applied retroactively to any previously permitted facility which is not requesting a permit to create a new or expanded discharge.
-While we understand the dischargers need to allow for future growth and expansion during the facility planning stage we feel it is the Department's responsibility to ensure that any increase in pollutant loading to Iowa's waters is necessary for the social and economic importance of the affected community. We understand that degradation will not occur if the new proposed limits are less than or identical to the limits in current permits. However, many permits have been issued in Iowa that allow increased pollutant loading to Iowa's waters because the plant is actually designed for more capacity or the Waste Load Allocation for the permitted pollutants has been recalculated.
-Section 2.2 of the draft Iowa procedures contains several exemptions for categories of activities that are deemed to "not be considered to result in degradation." One of these situations is the issuance of a permit for an existing facility that "does not propose less stringent permit limits or increased treatment plant design capacity." This exemption may be appropriate in cases where the facility in question has previously undergone an antidegradation review and the resulting effluent limitations have been determined to be "necessary." In these cases, a permit renewal with identical permit limits would prevent further degradation of water quality and a Tier 2 antidegradation review would be unnecessary. However, many Iowa facilities have been previously granted effluent limits that authorize extremely high levels of ammonia and other toxic pollution without first evaluating whether these high limits were "necessary." In this situation, a permit renewal that "does not propose less stringent permit limits" would still allow the facility to continue increasing pollutant loading to Iowa waters without ever going through an antidegradation review. This would violate 40 C.F.R. § 131.12(a)(2), which requires states to demonstrate that degradation is "necessary to accommodate important social and economic development." In order to fix this problem, we recommend modifying the proposed exemption as reflected below and in Appendix A.A regulated activity shall not be considered to result in degradation, if:

A permit for an existing facility <u>that has previously been subject to an antidegradation review</u> does not propose less stringent permit limits or increased treatment plant design capacity;

DNR Response: Language was added during the stakeholder process to address this concern in Section 2.2 of the proposed AIP.

- ***A permit for an existing facility does not propose less stringent permit limits or increased treatment plant design capacity; or***

- ***Additional treatment is added to an existing discharge and the facility retains their current permit limits and design capacity; or***

The concept is that any increase in treatment plant design capacity is considered degradation will appropriately address these situations as all treatment plants have

specified design lives and will eventually need to be upgraded to accommodate for population growth, compliance with new water quality rules, or to maintain operational functionality. It is not appropriate or logical to go back and perform a review for discharger that isn't proposing any changes. It would not produce any meaningful result in regard to preserving water quality, in part because alternatives to continuing to allow the plant to perform within its design capacity will be cost prohibitive by definition. The alternatives analysis will always fail.

The example cited would appear to support an argument for more stringent technology based limits for ammonia, and possibly other pollutants. This is an issue that is beyond the scope of this antidegradation rulemaking.

Issue: Please provide an approvable technical justification for the new combined sewer overflow (CSO), "residual chlorine," the thermal discharge exemptions or eliminate these exemptions from the AIP.

-Section 2.2 of the draft AIP also includes categorical exemptions for certain combined sewer overflow (CSO) projects, "residual chlorine discharges," and "thermal discharges that [have] been approved through a Clean Water Act 316(a) demonstration." These exemptions were not discussed in the workshop process and were added to the AIP late in the rulemaking process. The draft AIP does not provide a basis for these exemptions.

-A recent decision of the United States Court of Appeals for the Sixth Circuit highlights the problems that these kinds of categorical exemptions present for the prospects of U.S. EPA approval. *See Kentucky Waterways Ass'n v. Johnson*, 540 F.3d 466 (6th Cir. 2008). In that case, the Court remanded EPA's approval of several categorical exemptions in the Kentucky antidegradation implementation rules. In reviewing a proposed exemption for CSO projects in Missouri, EPA Region 7 similarly informed Missouri DNR that "it seems inconsistent with the State's antidegradation policy to exclude an entire class of pollutants." In order to avoid problems with EPA's approval of the draft AIP, IDNR should eliminate these categorical exclusions or provide more technical support for its determination that these categories of discharges will never result in degradation of Iowa water quality on an individual or cumulative basis.

DNR Response: The department will eliminate the residual chlorine exemption in the final AIP due to the fact that a detailed scientific justification is not available at this time. The CSO exemption will be removed as it is identifying a situation that does not result in degradation. The temperature exclusion is consistent with 40 CFR 131.12(4) and Section 316(a) of the Clean Water Act.

See Recommendations #4 and #5.

Issue: Please clarify how the Department intends to determine whether a proposed activity will cause degradation based on the specifics of proposed "watershed-based trading."

-Section 2.2 of the draft AIP indicates that a discharger may be able to demonstrate that a proposed activity will not cause significant degradation based on a proposed watershed-based trading scheme that has been agreed to by the project applicant. The AIP also notes that Iowa does not currently have a watershed-based trading program in place. Accordingly, we respectfully request additional details regarding how the Department will determine whether or not a specific trading proposal would cause degradation. We assume that the Department will require applicants to comply with U.S. EPA guidance documents on watershed-based trading and that it will require any eventual trading proposals to be based on concrete and enforceable offsets in the same watershed as the proposed activity. If this is not the Department's intent, we respectfully request clarification for the record.

DNR Response: Any watershed trading program will be review and designed properly and any trading proposals should be based on enforceable offsets in the same watershed of the proposed activity.

Issue: Please confirm that the Department intends to apply Tier 1 to protect existing instream water uses and maintain the level of water quality necessary to protect the existing uses.

-*It is our understanding that IDNR intends to implement Tier 1 protection consistently with EPA's interpretation of 40 C.F.R. § 131.12(a)(1) to protect existing beneficial uses and the levels of water quality necessary to protect such uses. In some cases, this may require DNR to deny an activity if it would impair a beneficial use for reasons that cannot be tied to an applicable water quality criterion. If this is not IDNR's intent, we respectfully request the Department to clarify this for the record.*

DNR Response: The final AIP will be revised to clarify this distinction and provide consistent language when using the terms "existing use", "beneficial use", and "designated use".

Issue: Please clarify the exemption allowing "temporary and limited" degradation.

-The AIP provides the department with discretion to determine what qualifies as "temporary and limited" based on a number of factors, including "the length of time" water quality will be affected and the "percent change in ambient conditions." These factors, however, do not provide the department or the public with guidance as to how much time or what percent change in conditions will be acceptable.

-U.S. EPA Region 8 guidance provides that "temporary and limited" effects should generally last less than 1 month and result in less than a 5% change in ambient conditions. We recommend including similar language as reflected in Appendix A to provide more guidance to applicants and the public. If the department declines to include this guideline or something like it, we request the department to clarify how it intends to

ensure that the "temporary and limited" exemption will apply only in situations that are truly temporary (e.g. less than one month) and have a minimal impact on ambient conditions.

DNR Response: The department intends to apply the "temporary and limited" provisions to situations that are truly temporary and have a minimal impact on ambient conditions. Given the wide variety of potential activities that may occur it is not felt to be appropriate to place specific time and percent change values. The department does not anticipate many permitted activities will qualify as temporary and limited and therefore do not anticipate these provisions having widespread use. For example, certain hydrostatic testing activities may be considered temporary and limited.

Issue: Please clarify how the Department will implement its antidegradation policy for activities that require Section 401 certifications.

-There is not a problem in principle with IDNR incorporating antidegradation considerations into the existing § 401 certification process. However, the draft provides very little detail regarding how the Department will actually do this. In addition, the AIP includes some troubling language that appears to abdicate the Department's authority to make independent determinations regarding antidegradation compliance in its § 401 certification process in favor of simply rubberstamping U.S. Army Corps of Engineers decisions on § 404 permits.

-The Department should explicitly state in the AIP that it will not issue a § 401 certification if reasonable non-degrading or less-degrading alternatives exist or where the degradation resulting from the project is not necessary to accommodate important social or economic development. If this is not the Department's intention, the Department should make this clear for the record in its response to comments.

-Please confirm that the Department intends to exercise its own independent judgment regarding antidegradation in § 401 certifications rather than simply rubberstamping U.S. Army Corps determinations on § 404 permits.

-Please clarify that the department shall not issue a § 401 certification if reasonable non-degrading or less-degrading alternatives to a proposed activity exist or where the degradation resulting from the project is not necessary to accommodate important social or economic development.

-Please provide additional detail regarding how the Department intends to make the determinations described above.

-Applicability for other permits including 401 and 404 certifications. Language related to 401 and 404 certifications should differentiate between temporary and non-temporary activities.

DNR Response: Projects requiring individual permits are reviewed by many people throughout various sections of the DNR (401, T & E species, wildlife, fisheries, TMDL, Flood Plains, Sovereign Lands) as well as the resource agencies (EPA, USFWS, NRCS, etc.) and the public. All of their comments and concerns are passed along to the applicant to help revise the project to be non-degrading or the least degrading, practicable project. The notion that this constitutes "rubberstamping" is unfounded.

The DNR works with applicants to explain the environmental impacts of their originally-proposed project and to inform the applicant if there are alternatives that are non-degrading or less-degrading and may be a better way of achieving the applicant's proposed project purpose. Most applicants are willing to revise their projects and provide mitigation for unavoidable impacts. Others, unwilling to revise their projects, either withdraw their project or the Corps withdraws their project because the applicants could not justify why they should be allowed to degrade Iowa's water quality.

In circumstances where it is important to accommodate social or economic development, mitigation must be provided.

Issue: Please clarify how the Department will implement its antidegradation policy for activities that require NPDES storm water permits.

-Section 6.4 of the AIP states that storm water discharges authorized under storm water permits are not required to meet the same antidegradation requirements that apply to other NPDES permits. Instead, the draft states that antidegradation reviews will be "based on an adaptive management approach" that may include "effectiveness monitoring" and some unspecified future actions to ensure "compliance with the requirements of the storm water permit." The vague discussion in the AIP provides EPA and the public with no insight into how IDNR actually intends to ensure that antidegradation requirements are met in storm water permitting. It appears, however, that this "adaptive management" approach may rely on reactive steps after water quality impacts have already happened instead of proactive approaches to avoid unnecessary degradation of water quality.

- It is not clear from section 6.4 of the draft AIP how the Department intends to ensure that reasonable less-degrading alternatives are fully considered.

-Please describe in more detail how the Department intends to implement its antidegradation policy for activities requiring NPDES storm water permits.

-Please clarify how the Department intends to identify reasonable low impact development designs and other best management practices that could be applied to minimize post-construction runoff and other pollutant loading MS4 systems.

-Please confirm that all reasonable non-degrading or less-degrading alternatives will be incorporated into NPDES storm water permits under Iowa's antidegradation policy.

-Antidegradation is not the proper mechanism to regulate storm water discharges and should not apply to the storm water permitting process where BMPs are typically used resulting in water quality improvement not degradation.

DNR Response: Any reissuance of an individual MS4 permit will need to incorporate provisions consistent with the antidegradation policy and procedures. MS4 permits by their very nature are different than a typical municipal wastewater treatment facility NPDES permit and require a different approach. Adaptive management is a systematic process for continually improving management policies and practices by learning from the outcomes of implemented storm water control practices. Today's MS4 permits currently require cities to make evaluations for post-construction runoff

controls. The MS4 permits reissued in the future will begin to specify the exact requirements that must be met. Since Cities are charged with managing and implementing the provisions in these permits, similar to larger cities with pretreatment programs, much of responsibility for implementation of antidegradation provisions will then belong to the Cities.

Future permits for MS4 facilities will incorporate provisions that will require antidegradation review for applicable storm water discharges to ensure non-degrading or less-degrading alternatives are appropriately considered consistent with the AIP. This could include low impact development design, ensuring post-construction groundwater recharge levels be equivalent or better than pre-construction groundwater recharge levels, or other BMPs. Each permit reissuance will review and update BMPs to consider new and innovative storm water management practices that may become available.

Issue: Please clarify how the Department will implement Tier 2 antidegradation protection for pollutants (most notably sediment and nutrients) for which there are currently no numeric water quality criteria.
-Applicants cannot be expected to conduct antidegradation analyses on parameters that have only narrative criteria and no established guidance on how to translate the narrative criteria into a numeric value.
-I do not believe that the anti-degradation policy should be overly broad and try to account for future potentially regulated pollutants that are not currently regulated.
-The Draft AIP defines "pollutants of concern" to include "those pollutants which are reasonably expected to be present in the discharge and may reasonably be expected to affect the beneficial uses." We understand this definition to include pollutants, such as nitrogen and phosphorus, that do not yet have numeric criteria. 40 C.F.R. § 131.12 does not distinguish between pollutants with narrative and numeric criteria for the purposes of antidegradation protection and neither does U.S. EPA. For example, in response to Missouri's draft antidegradation implementation rules, Region 7 requested that Missouri "clarify with its submission that the current definition of 'pollutants of concern' is not limited to just those pollutants with numeric criteria, but also includes other pollutants covered by the state's narrative criteria that have the potential to degrade water quality." We assume that IDNR interprets the draft AIP to require antidegradation review for new or expanded loadings of nitrogen, phosphorus, and other pollutants without numeric criteria. *If this is not the case, we request the Department to clarify its interpretation of "pollutants of concern" for the record.*

DNR Response: Yes, where there is a reasonable expectation uses may be adversely affected by nutrients or other pollutants there will be review. Also see "Issue: Definition of "Pollutant of Concern"" above for additional detail.

Issue: Please clarify how the Department intends to review an applicant's review of less-degrading alternatives.

-Regarding the evaluation of "economic efficiency," the draft AIP states that alternatives that impose a cost that is "disproportionate to the possible environmental gain" may be eliminated from further consideration. We respectfully request the Department to clarify how it intends to make this determination. In particular, we want to ensure that the 115% "non-binding guideline" will not be used to eliminate alternatives that would otherwise result in a substantial improvement in overall water quality. We first note that, as a matter of principle, an arbitrary cost threshold such as this is not an appropriate factor to determine whether a pollution control alternative is reasonable or effective. A proper review must include not only the cost of the alternative, but also a comparison of the pollution control benefits that it delivers. In other words, it is a cost-*effectiveness* test, not just a cost test. That is why the "guideline" in the draft AIP states that alternatives costing *less* than 115 percent of the base cost are presumed to be economically efficient, but it does not exclude alternatives that cost *more* than 115 percent if the alternative will result in a substantial improvement in water quality. *We respectfully request the Department to confirm that it will not arbitrarily eliminate alternatives costing more than 115 percent of the base cost from consideration.*

DNR Response: The Department will not arbitrarily eliminate alternatives costing more than 115 percent of the base cost from consideration as stated in the AIP.

Issue: Please clarify how the Department intends to determine the "importance" of social and economic development when conducting a Tier 2 review.

-In order to clarify how DNR intends to perform this important socio-economic balancing test, we respectfully request a response that describes how the Department will consider the overall impact of a proposed activity on a community. Please confirm that the Department will not consider projected socioeconomic development to be "important" if the predicted benefits of the proposed activity are outweighed by the foreseeable socioeconomic tradeoffs resulting from lost assimilative capacity and increased pollution.

-When considering the economic benefits in a cost-benefits analysis, the economic benefits of maintaining high water quality must be weighed against the economic benefits of a change in industrial procedure or expansion.

DNR Response: The department will not consider projected socioeconomic development to be "important" if the predicted benefits of the proposed activity are outweighed by the foreseeable socioeconomic tradeoffs.

Issue: Please clarify how the Department intends to "assure that there shall be achieved … all cost-effective and reasonable best management practices for nonpoint source control."

-We respectfully request a response from the Department to clarify whether or not it intends to comply with the EPA guidance and district court pronouncements discussed

above when considering whether to permit the lowering of water quality from point sources under the AIP.
-We want strong linkage between point source requests for increased pollution loads and vigorous BMP compliance by all other pollution contributors in the watershed.
-The proposed antidegradation regulations need not require nonpoint source control prior to authorizing degradation of water quality. As currently written, Iowa's proposed antidegradation policy contains language which reads "[t]he Department shall assure… all cost-effective and reasonable best management practices for nonpoint source control *before allowing* any lower of water quality." 568 IAC 61.2(b) (emphasis supplied). Iowa's draft Implementation Procedure reiterates the requirement that the Department is to assure that activities within the watershed are implementing best management practices for nonpoint source pollution *prior to allowing* degradation to water quality. While some of this language is obviously pulled from the federal antidegradation provisions found at 40 CFR 131.12(a)(2), the parallel federal antidegradation provision does not, as written, require implementation of BMPs prior to allowing degradation to water quality from point sources. In fact, the original July 3, 2008 draft Implementation Procedure expressly stated that the Federal rules "do not require that states adopt or implement best management practices for nonpoint sources prior to allowing point source degradation of a water." *Id.* As the federal rule does not contain language that holds point source load changes hostage to non-point source implementation, DNR should not include such an inappropriate requirement in state rules. DNR's antidegradation policy and Implementation Procedure should be written in a manner that properly reflects the actual language of the federal rule, the clarification set forth in the aforementioned memo, and existing case law.
-The proposed antideg regulations need not require nonpoint source control prior to authorizing degradation of water quality. Communities should not be forced to await DNR BMP implementation to allow local growth, and EPA has never, to our knowledge required such BMP implementation as a prerequisite to local growth. The CWA nowhere expresses that such requirements must be implemented before a community may grow. Therefore, the DNR should clarify, that as appropriate, BMP implementation will not be a condition precedent to approving an application resulting in degradation.
-when application is made for additional pollution from regulated discharging sources, we request that DNR carefully review the status of manure management plans and conservation plans for all agricultural operations in the watershed in making a determination whether to issue a permit under these antidegradation rules
-I know that strong antidegradation rules won't clean up Iowa's water. But they are an essential start. In particular, there should be a strong link between point-source requests for increased pollution loads and known, confirmed best-management-practice compliance by other pollution contributors in the watershed. For example, only a small percentage of farm conservation plans are actually reviewed each year. Before granting a request for increased point-source pollution in a given watershed, most of the farm conservation plans in that watershed should be checked to see if the operators are actually in compliance.
-We support and appreciate the AIP's acknowledgement that the EPC does not have authority to implement mandatory controls on nonpoint sources. However, we do not agree with the implication that mandatory controls must be imposed to implement the

antidegradation policy. As described above, EPA guidance authorizes the use of voluntary nonpoint source programs to satisfy their regulation. We ask that this rule proposal include language acknowledging voluntary programs satisfy the EPA's requirements.

DNR Response: Section 8 of the AIP states:

> ***When applying Tier 2 review to a proposed regulated activity the department shall assure the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control before allowing any lowering of water quality. To the extent that existing programs establish best management practice requirements for entities contributing to nonpoint pollution those requirements establish the maximum regulatory requirements that can be required pursuant to rule 61.2"b" and 40 CFR 131.12(a)(2). In many cases the Department lacks the authority to require entities that contribute to nonpoint pollution to implement all cost-effective and reasonable best management practices. In either situation, additional best management practices or regulatory requirements must be imposed through modification of statutes or rules outside of the antidegradation review.***

This section is consistent with the EPA guidance quoted above.

Issue: Public notices should be posted on the department's web site

-Effective public participation depends on an effective and reliable method of public notice. As discussed during the antidegradation workshop process, providing public notice and a repository of relevant documents on the Department's website would be tremendously useful and would be an efficient way to avoid disputes and additional workload related to public access to information.

-We also request that the Department establish a publically accessible method for tracking these permits to allow public input in determining cumulative impact to waters or watersheds affected by activities covered under general permits.

DNR Response: The department is committed to making public notices for regulated activities more accessible and available on the web. Public notices for individual NPDES permits and detailed information for general permits #1, 2, & 3 are currently available through the web. However, the department cannot currently commit to "requiring" public notices be accessible on the DNR website due to the unknown amount of database work, unknown costs, and unknown future budget constraints.

Issue: Please clarify how the Department intends the draft AIP to relate to the calculation and implementation of Total Maximum Daily Loads (TMDLs).

DNR Response: The TMDL language has been clarified in the final rule.

See Recommendation #8.

Frequently Asked Questions (FAQ):

FAQ: What is the new source policy?
-Are new sources/NPDES permits allowed on Tier 1 & 2 streams? Are they subject to anti-degradation determinations?

DNR Response: Antidegradation provisions apply to regulated activities that may degrade water quality in Iowa. Tier 2 reviews shall be conducted for new and expanding discharges to all surface waters of the state where existing water quality is better than applicable water quality standards as determined on a pollutant-by-pollutant basis.

FAQ: Intergovernmental Coordination
-Is intergovernmental coordination/notification with Federal agencies necessary?

DNR Response: Yes, intergovernmental coordination is a required part of any state's antidegradation policy and implementation procedures as specified in 40 CFR 131.12.

FAQ: Will this proposal rise to a level of a taking of private property for public use without just compensation?

DNR Response: No.

FAQ: Is Tier 2 review required for non-discharging facilities?
-Anti-degradation review not required for non-discharging facilities? What about treatment systems that may create non-point discharge?

DNR Response: Antidegradation applies to regulated activities as defined in the AIP. Non-degrading alternatives are not required to undergo a Tier 2 review.

FAQ - Can an existing industry expand if the industry will be improving the water quality by not increasing the effluent and not affecting the ambient conditions in the water body (i.e. increases the load, dilutes the pollutants in the water, decreases/maintains effluent levels and overall improves the water quality)?

DNR Response: Assuming a typical Tier 2 review, yes. If the increased loading is a pollutant of concern, then a Tier 2 review will be required, but this will not prevent an existing industry from expanding.

FAQ - Can a new industry locate its facility on an Outstanding Iowa Water if it improves the water quality, without affecting existing levels, but has no other "perceived" value? If an industry meets all criteria, and the public is opposed, will the facility be prevented from using that water as its main source?

DNR Response: Yes, this is possible. There is the ability to justify that a new source documents that less-degrading alternatives are not available, that effects on existing water quality be minimal, and that the project will, overall, serve to enhance the value, quality, or use of the OIW. Improving water quality can be viewed as an enhancement depending on the specifics of the situation

FAQ: Will facilities affected by UAAs have to perform tier 2 reviews?
-We oppose any effort to make communities undergo a Tier 2 evaluation as they upgrade current facilities to meet the new stream designations and water quality standards. This additional cost is unwarranted as communities will be increasing water quality protections, not increasing loadings.

DNR Response: Yes and no, depending site-specific nature of the upgrades facilities are looking to employ. It is clearly recognized that facilities affected by UAAs will need to meet more stringent permit limits thereby improving the water quality of their effluent and the receiving stream. In this sense, facilities affected by UAAs may not trigger the need for a tier 2 review. However, if the facility is increasing the design capacity of the facility beyond what it is currently designed treat, then the increased design capacity will trigger the tier 2 review as there is the potential to degrade in the future.

FAQ -How will out-of-state towns discharging to a border watercourse be impacted by IDNR's antidegradation policies?
-How do handle interstate loading from Minnesota?

DNR Response: There are no impacts foreseen at this time. Enforcement of interstate water quality policy falls to the EPA. There are no known efforts on the part of EPA to address the issue at this time.

FAQ -How will you ensure consistency amongst those reviewing alternatives analyses?

DNR Response: The process established is intended to make departmental review of alternatives analyses as procedural as possible. The department does not anticipate issues with consistency with this review process.

FAQ -Do you see the state ever allowing credits or trading of water quality constituent?

DNR Response: Yes, this is a very real possibility in the future.

FAQ -Will effluent mass limits be frozen at the time of anti-deg implementation?

DNR Response: No.

FAQ -If a new limit is provided for nutrients, etc. What is the anticipated start point from which to judge antidegradation?

DNR Response: Antidegradation is not intended to establish limits for pollutants of concern for which there are no numerical criteria. Where nutrients are identified as a pollutant of concern a Tier 2 review will be needed requiring an examination of treatment alternatives.

FAQ: Specific example
-If the permit limit is 25 lbs/day and the treatment level achieves 15 lbs/day, will the 25lbs/day be allowed in the future?

DNR Response: If you are currently permitted at 25 lbs/day and you treat at 15 lbs/day, then the 25 lbs/day permit limit is allowable in the future without requiring a Tier 2 review.

FAQ -Does IDNR intend to require an individual permit (and associated antidegradation review) if cumulative degradation resulting from multiple general permit discharges within a watershed, degradation from a single discharge over time, or other individual circumstances warrant a full antidegradation review? How does DNR intend to make decisions regarding whether to require an individual permit?

DNR Response: Decisions will be made on a case by case basis considering the facts of the situation. The department will also utilize GIS mapping technologies to help identify areas that have high concentrations of activities regulated through general permits.

FAQ -How will the Department consider antidegradation requirements, including alternatives analysis and socioeconomic considerations, at the time of general permit issuance or renewal?

DNR Response: The antidegradation analysis for general permits will consider the question . . . "Is degradation necessary to support important social and economic development?" Best management practices will also be reevaluated every 5 years with reissuance with the general permit.

FAQ -How will the Department ensure that the continued or repeated use of general permits will not lead to cumulative degradation of water quality?

DNR Response: Best management practices will be reevaluated every 5 years with reissuance with the general permit. The department will also utilize GIS mapping technologies to help identify areas that have high concentrations of activities regulated through general permits.

FAQ -How will the Department ensure that general permits are not used in circumstances in which degradation could occur to sensitive waters of biological significance, including waters providing habitat for rare or endangered species?

DNR Response: Decisions made on a case by case basis considering the facts of the situation. Fish & Wildlife Service also has the opportunity to comment during General Permit public notice.

FAQ -How does the Department intend to provide public access to information regarding general permit coverage and activities authorized by general permit?

DNR Response: See response to "Issue: Public notices should be posted on the department's web site".

FAQ -How does the Department intend to accept and account for information it receives from the public regarding the potential for activities authorized by general permit to result in significant degradation of Iowa water quality?

DNR Response: All information is reviewed and a responsiveness summary will be developed for the general permit rulemaking. If information is received for a notice of intent, public information will be duly considered and appropriate action will be taken.

Part 2: Outstanding Iowa Waters Amended Notice of Intended Action (ARC 8038B)

General comments in support of the inclusion of Outstanding Iowa Waters Category in the state's antidegradation policy

-Iowans want clean water. Antidegradation is intended to keep our water clean.
I believe that Tier 2.5 protection of Outstanding Iowa Waters is necessary to protect our high-quality waters and the language originally proposed in the Notice of Intended Action (NOIA) should remain as it was presented to the Environmental Protection Commission.
-The currently proposed 38 stream segments and 6 lakes are worthy of Outstanding Iowa Waters (OIW) protection. I encourage you to retain this list of streams and lakes as OIWs and to vigorously defend any challenges to it.
-I support the list of Outstanding Iowa Waters (OIW) currently proposed to receive Tier 2.5 protection. I have fished many of the cold water trout streams on the list including North Bear, French, Waterloo, South Pine, Spring Branch, Bloody Run, Richmond Springs, and many of the others. These streams are a gift from God to all Iowans and deserve the greatest protection and stewardship that we can afford them.
-Please get on with the antidegradation policy and let's help get the water cleaned up.
-Just because a stream is of higher quality should not make it an opportunity for additional municipal and industrial pollution. Iowa needs to do all it can to clean up the water.
-It is time that we give them the special protection they should have.
-Please support the protection of the Proposed Outstanding Iowa Waters. They are a treasure and a resource that benefits Iowa and it's residents and businesses. I visit these every week from May to September from my home in Geneseo, Illinois. Since I'm an Illinois resident I hope my support still counts.
-We feel deeply that the Iowa Great Lakes should be classified as an "Outstanding Iowa Water".
-I fully support the antidegradation rules and the OIW list.
-I am a native Iowan and dished out great state my entire life and find myself continually disappointed in the lack of care given our water. The current list of streams in no way reflects all those I feel deserved protection but it is a start.
-The polluters only destroy the future of Iowa, and they only care about their bottom line costs. The well being of Iowa is not something they factor in. However, it should be something our DNR considers.
-We must staunchly defend our resources for future generations, not just for the present, and I expect our DNR to be in the front lines. I understand how difficult it is to field pressures pushing ways against conscience and values. I have sat in that seat, and I understand the need to hear from citizens. I am hollering on this one.
-I'm concerned that without proper protection now many of these streams will face an uncertain future. It has been proven over and over again that some individuals, industries and municipalities are not good stewards of our land and waters. Our children, grandchildren and future generations deserve the opportunity to see and enjoy these streams just as we have.

-I would like to see those streams which are the best of the best receive a greater level of protection from new or expanded sources of industrial or municipal pollution.
-Any action to reverse the loss of clean water in our state and nationally should be immediately implemented.
-I am a NE Ohio native and I recall being laughed at by my fellow students at Simpson College in the early 1970s because I came from a place where a river was so polluted it actually caught on fire. Many of the people who found it funny were Iowa farm kids. Today I find it embarrassing that the waters in Ohio are in better shape than those in Iowa.
-The only people who are not in favor of such things are those who can make a buck or save a buck off of a degraded environment. That is very shortsighted. The long term economic well being of Iowa depends upon Iowa being a place that people and businesses are attracted to, not in an Iowa that students cannot wait to flee after they graduate.
-This protection will increase economic development opportunities when our citizens know our waters are clean.
-We Iowans need to start changing the way we think about our rivers and streams. It begins with categorizing our few remaining jewels as Outstanding Iowa Waters.
-We can't have economic prosperity without protecting the source of our economy – our natural resources.
-My wife and I, one a professional IT employee at Wells Fargo and the other a college professor, have started seeking employment elsewhere, due mainly to the degraded nature of Iowa's waters and lands. We are looking to relocate to Minnesota, a place with cleaner water. Please add my support to adding the proposed waterways to the Outstanding Iowa Waters program.
-Too often we spend large amounts of time, effort, and money attempting to reconstruct or rehabilitate natural spaces that have been destroyed. By moving forward with these 38 waters as OIW we are able to prevent their degradation.
-The City of Orleans at the regular City Council meeting on August 14, 2009 voted unanimously, 5 – 0, to urge categorization of Big Spirit Lake and East Okoboji Lake as Outstanding Iowa Waters.
-I support a proposal that will protect Iowa's valuable cold and warm water streams by limiting threats from pollution.
-We will be voting for future state officials who support our concerns for cleaning up the Iowa Great Lakes.
-The cold water and warm water streams listed as Outstanding Waters are a special gift that has been given to our state. We need to make every effort to not only protect them today, but for future generations.
-I am a Wisconsin resident and angler who spends a good deal of time in NE Iowa fishing, bird watching, and canoeing. I support the rule.
-Many of us have fished all over the United States and can attest to the little gem Iowa possesses in the spring creeks of northeast Iowa. We frequently encounter anglers from Minnesota and Wisconsin who recognize the high quality of the spring creeks of the area. These should be preserved at all costs as the economics of restoration are many time those of preservation.

-We support the categorization of Iowa's highest quality streams as Outstanding Iowa Waters.
-Start paying more attention to what individual citizens have to say instead of corporate lobbyists! Please protect these waters.
-I'm an old farmer, and I know what the ag investors can do to our water; the proliferation of ethanol, soy diesel plants, and refineries is a tremendous burden and threat to our waters. This is no time to get soft on anything.
-I am a relatively new Iowan, having lived here for only three years. I chose to come to Iowa in part because of its strong progressive traditions and spirit of community. In most ways, the state has more than met my expectations and I'm proud to be an Iowan. The one black mark—and it is a serious one—is the state's continuing tolerance of grossly substandard water quality. I recognize the importance of agriculture to our economy, but we cannot allow any sector simply to defy the law to the detriment of all citizens. I encourage you to retain this list of streams and lakes as OIWs and to vigorously defend any challenges to it.
-The Iowa Great Lakes are the greatest treasure there is in Iowa.
-These OIW streams in the Driftless Area are our inheritance from the last glacial period, impossible to replace and easily susceptible to injury from pollution, and the beneficiaries are all Iowans alive today and in the future.
-The proposed rules would finally give these waters the special protection that our current rules require, but which has never before been fully implemented in Iowa.
-Has Iowa become the cess pool of the nation? With actions like protecting polluters and giving them the opportunity to ruin our resources we will probably never recover and the polluters (Corporate Agriculture) will remain happy-destroying our environment!
-The antidegradation rules, and accompanying OIW designations, will have a great impact on our work in support of efforts to restore and enhance Iowa's coldwater resources. At the same time, the mere presence of the list will by its very nature define the limits of that potential. In order to ensure that we can continue to expand our efforts to support DNR, NRCS, SWCD and county-based initiatives, it is imperative that the list be as inclusive of key resources as is possible. The failure to do so, especially in the case of the highest profile locations, could have a substantial chilling effect on the fundraising and publicity efforts as we work to support the DNR's long-term coldwater fisheries vision.
-The current level of water quality in OIWs must be maintained and protected, especially since the HQ designation is proposed to be replaced by the Tier 2.5 classification.
-We need to protect our watersheds from the toxic organic pollutants of large confined animal feeding operations. These are adversely affecting human health as well as the health of our valuable ecosystems.

General comments against the inclusion of the Outstanding Iowa Waters Category in the state's antidegradation policy

-New rules purposed by the DNR would add to the cost and profitability of farming and may even prohibit a needed expansion or upgrade.
-The rules would more economic stress to a already struggling livestock industry in Iowa.

-I don't support including a Tier 2.5 category in the proposed antidegradation rulemaking because it prohibits new discharges and it is not required by federal law.
-I feel Iowa should not be more restrictive than what is required by federal law.
-The additional restrictions in Tier 2.5 are not necessary to protect Iowa waters.
-You must consider whether farmers can afford to comply with the proposed regulations.
-Please consider the economic impact of new regulations before mandating them on Iowa farmers like myself.
-It seems like every time I turn around the DNR is trying to run us out of business.
-I understand the federal law requires changes to improve water quality, but why does the DNR want to implement rules that go beyond what the federal law wants in these tough times.
-Please strike a reasonable balance between "ideal" and "current status" and take slow steps so as not to cripple an already shaky situation.
-Please look for ways to protect the environment while allowing communities to rebuild and grow.
-How are businesses, citizens, municipalities, and farmers going to pay for implementation? Rural Iowa communities are very fragile right now.
-I feel we need to stop focusing on making rules that make growth in Iowa difficult.
-Please find a balance between environmental and economical approaches.
-The state of Iowa does not need more laws or rules trying to put farmers and business people out of business.
-Please do not impose rules that are more stringent than Federal laws on water quality.
-Farmers cannot afford or need the Tier 2.5 level.
-This rule will make infrastructure more expensive.
-Tier 2.5 creates an unfriendly business climate in Iowa and makes it more difficult for residents to pay their bills every month.
-I am opposed to antidegradation. It will have a negative effect on my business, my neighbors, and Worth County.
-I don't feel these rulings will help to improve our environment.
-If I fail in business due to poor business decisions, shame on me. If I fail to be able to stay in business because of constant regulation, shame on you.
-It's time to stop over regulation in this state by unelected and unaccountable officials. It is long past time to abolish the EPC and hold our elected officials accountable for the overburdening rules and regulations now in place. They are the ones who were elected, let them make the rules instead of hiding behind the EPC.
-Rulemaking has gone too far without representations from the electorate.
-Some businesses may choose to move their businesses out of state. Start-up businesses may not even consider Iowa because of the additional economic burden compliance will create.
-The antidegradation rules are a roadblock to recovery.
-Once again the bias EPC and the much more useful DNR are out to over regulate, this time antidegradation rules reaching beyond federal law.
-While you are attempting to protect the environment, please allow communities to rebuild and grow. Please don't squash them.

-You seem intent on turning Iowa into an untamed wilderness for your personal enjoyment. There are thousands of Iowans that would like to be able to earn a living by following the existing laws.
-Do not price the farmers out of business.
-The state and nation will experience much higher food and fuel cost if EPC continues the path they are on.
-Added rules and regulations for crop farmer to abide by will add to the cost of domestic food productions and higher food cost.
-This proposed change will make it harder for local communities' especially smaller ones to survive, job losses will result and new job creation a struggle.
-Is this really needed or is this just some pipe dream of some parasite on the state of Iowa's payroll? I wish the state legislature would get smart and downsize the DNR.
-Use some science and common sense before enacting these regulations.

DNR Response: Please see "Issue: This is not required by federal law" and Issue: "Issue: Why implement this?"in Part 3 of this summary.

Specific issues relating the amended notice of intended action:

Issue: The DNR should not weaken the OIW protections
- By proposing new, "softer" language, the DNR is only succumbing to pressure by polluters. The burden of justifying additional pollution should fall on the polluters, not Iowans who may want to nominate future waters to the list.
-I'm VERY OPPOSED to the "changes" DNR want to make regarding weakening the antidegradation rules and categorizations of Outstanding Iowa Waters. What a huge disappointment this would be for all Iowans who are thinking beyond just today.
-Protection of the cold water trout streams in Northeast Iowa from further degradation has potential economic benefits for Iowa by supporting inviting tourist destinations with diverse forms of recreation, shopping, dining, and lodging. However, we understand the economic development concerns of communities and industries which discharge their waste water into these streams. We are willing to discuss flexible and creative implementation strategies that can be considered that will protect these Outstanding Iowa Waters while still allowing for reasonable growth and economic development.

DNR Response: The DNR is proposing to afford more flexibility how regulated activities are considered in Outstanding Iowa Waters. The original proposal prohibited any degradation due to expansions. Based on heavy public input from a variety of stakeholders including some environmental groups, the department is recommending that expansions be allowed to occur for existing discharges, but is still protective of Iowa's outstanding resources by not allowing the cost-effective cap to be considered in the alternatives analysis. Therefore, any existing facility proposing an expansion that may degrade water quality in an OIW must select the least degrading option they can afford.

Issue: Departmental Costs
-The DNR must consider the budget cost of rules like antidegradation, not only from a government administration perspective but also from the regulated community perspective. How is the state going to pay for administration and enforcement?

DNR Response: Costs to the agency are highlighted in the Fiscal Impact Statement and Regulatory Analysis available on the department's website at http://www.iowadnr.gov/water/standards/antidegradation.html

Issue: OIW will stop economic development in Iowa
-The antidegradation rules will stop most of the economic development in Iowa. Does the DNR want to responsible for Iowa not growing?
-Especially in this economic downturn the cost to do a review of affordable alternatives on top of the cost of the project would discourage much needed economic development throughout our state.

DNR Response: The department does not agree with the contention that this will stop economic development in Iowa. For more additional discussion on this issue, please see the Fiscal Impact Statement and Regulatory Analysis available on the department's website at http://www.iowadnr.gov/water/standards/antidegradation.html

Issue: The Iowa Great Lakes and OIW
-We believe West Lake Okoboji and Big Spirit Lake should be categorized as Outstanding Iowa Waters because of their demonstrated water quality and multitude of uses.
-We believe East Lake Okoboji should also be given OIW protection. Though it does not have as high water quality, its waters mingle with those of West Lake Okoboji and therefore need that level of protection in order not to degrade West Lake. Its uses and volume of traffic are similar to those of West Lake.
-We do not think Upper Gar, Lower Gar or Minnewashta Lakes are high enough quality to merit OIW categorization and protection.
-I would like to encourage the DNR to include West Okoboji and Spirit Lake on the OIW list.
-Upper Gar and Lower Gar are listed as impaired waters and I now believe it would weaken the intent of the OIW/Tier 2.5 provision of the proposed antidegradation rules if they were to be included as OIWs. Additionally, the nomination of West Okoboji, East Okoboji and Big Spirit will still advance the improvement of the Lower Chain.
- I support the nomination of East Okoboji as an OSW, not because of its outstanding water quality - for that cannot be scientifically supported except for the lower most basin (see data from the Cooperative Lakes Area Monitoring Project coordinated by Iowa Lakes Laboratory which monitors five locations on East Okoboji), but because it flows occasionally into West Okoboji (see OPA comment letter for documentation of the Bachman and Jones study and the data from the USGS gauge between East and West Okoboji). The biggest threat to water quality of that lake and West Okoboji and the

Lower Chain comes from unregulated storm water discharge due to intensive urban development pressure in the Iowa Great Lakes region. The occasional flow from East to West Okoboji will only intensify with increased urban development. This demonstrates the need for a watershed, not a lake by lake approach, to water quality improvement and protection that is consistent policy wise and scientifically valid.
-I also implore the DNR consider all sources of data in making OSW designations, such as those referenced in the Okoboji Protective Association letter that document flow of water from East Okoboji into West Okoboji; the USGS gauge data between East and West Okoboji; the scientific and economic data published in the Iowa Great Lakes Watershed Assessment available online; and data from the Cooperative Lakes Area Monitoring Project, the longest continuous lake monitoring program in Iowa.
-There needs to be more public education about the "pea soup vs. garden salad" dilemma in how to manage shallow lakes. If the Lower Chain of Lakes are declared as OSW, then there needs to be consensus on how to balance the impact of boating on water quality on shallow lakes vs. expectation of body contact recreation opportunities.
-The quality and the clarity of the water are priceless. According to the Dickinson County Assessor, assessed lake-front property values on West Lake exceed one billion dollars.
-I support including the Iowa Great Lakes as OIWs, including Little Spirit Lake.
-I urge you to include all of the Iowa Great Lakes – Big Spirit, East & West Okoboji, Upper & Lower Gar and Minnewashta – in the list of Outstanding Iowa Waters. These lakes meet the criteria for inclusion. The Iowa Great lakes are state resources of immeasurable value. The water in the lakes must be safeguarded from any decline in quality.
-I want to see Big Spirit Lake protected. Without Tier 2.5 protection I'm concerned over development will affect water quantities in the lake.
-All six of the Iowa Great Lakes deserve to be recognized as OIWs.
-When East Lake Okoboji is an OIW, the City of Spirit Lake will have to stop using East Okoboji Lake as its storm sewer.
-We support the inclusion of all six lakes as OIW for 4 reasons: 1) The economy and region depends on the quality of the water of these lakes; 2) East Lake should have all the same protections as West Lake and Big Spirit because East and West Lakes waters commingle as do fish, fowl, and boat traffic; 3) East Lake is more desirable place for water skiing, tubing, etc; and 4) the lower chain have unique character, connected to all the other lakes, and therefore are a part of the entire economic package.
-It is clear that the Iowa Great Lakes is ONE area and has a common bond when it comes to water quality and to anything other than to treat the Iowa Great Lakes as one entity would be very wrong.
-West Okoboji, Big Spirit Lake and East Okoboji surpasses all their lakes in the state of Iowa for water quality.
-I can support West Lake Okoboji and Big Spirit Lake for water chemical properties and recreational value to be on the list of OIWs, I definitely support East Lake Okoboji to be the list, not as much for chemical properties but for recreational value and also the mixing of waters from East Lake into West Lake Okoboji. It is important they get the same protection as they do mix.

-I do not support the lower chain of lakes because two of the lakes are impaired already. They have recreational value, but I don't think they quite meet the OIW criteria as outlined by the Iowa DNR.
-The six lakes in the Iowa Great Lakes Chain are important recreational and ecological resources and we believe all six of the natural lakes in Dickinson County meet the criteria for Outstanding Iowa Waters. However, the two largest lakes of the chain, West Lake Okoboji and Big Spirit Lake, have the best water quality and are the highest priority for protection. West Lake Okoboji is one of a few deep blue water lakes in the world, and is known for its clear water. Big Spirit Lake is a shallow, sprawling prairie lake that is Iowa's largest natural lake at 5,864 acres.
-At the September 3rd Public Hearing at Iowa Lakeside Laboratory we learned the DNR was not aware that data sources exist documenting the occasional flow of water from East Okoboji into West Okoboji. This was originally documented in the first ever watershed study of the Iowa Great Lakes conducted by Bachman and Jones, then of Iowa State University, supported by a grant from the then Iowa Great Lakes Water Quality Control Plan, published in May 1974. A copy of this study is available by contacting the Okoboji Protective Association. Pages 107 through 112 of the report describe the interchange of water between East and West Okoboji based on a transect between the "deep hole" in West Okoboji eastward through Smiths Bay into East Okoboji from the years 1971 – 1973. Several water quality parameters were measured. IF there were no mixing between the two lakes, it would be assumed that there is a general outflow from West into East Okoboji. Instead, "there was a gradient extending across the connection, indicating that some of the East Okoboji water was flowing into West Okoboji and that most of the West Okoboji water was flowing into East Okoboji. ….Lake East Okoboji had a higher ratio of watershed area to lake area than did Lake West Okoboji. During periods of rising water levels, Lake East Okoboji would rise at a more rapid rate the Lake West Okoboji if runoff volumes per unit area are the same in the two watersheds. Thus, water would tend to flow from East Okoboji to West Okoboji at those times. During period of falling water levels due to outflow though the Lower Gar Lakes the flow would be in the other direction. During periods of stable water levels, wind action and waves would tend to cause a small interchange of water in the immediate vicinity of the bridge. Ground water flows may also play a role in determining the pattern of flow between these two lakes. " (pp 111 - 112, "Water Quality in the Iowa Great Lakes, A Report to the Iowa Great Lakes Water Quality Control Plan" by Roger Bachman and John R. Jones, Iowa State University , Ames Iowa , May 1974) Subsequently, the USGS placed a gauge between East and West Okoboji as part of a drinking water source study prompted by Milford Water Utilities during the early years of 2000. Data can be viewed on line at http://waterdata.usgs.gov/ia/nwis/uv?site_no=06604215 The major urban development pressure in the Iowa Great Lakes is occurring in the East Okoboji watershed between West and East Okoboji. For this reason, and those listed in the comment letter to the DNR submitted by the East Okoboji Lakes Improvement Corporation, the OPA especially supports the nomination of East Okoboji as an OSW.

DNR Response: In the August 12, 2009 amended notice of intended action, the Commission invited further discussion and comments to determine which Iowa lakes, if any, should be designated as Outstanding Iowa Waters in the final rulemaking. The Commission specifically requested information for inclusion or exclusion of any of the

Iowa Great Lakes and the public responded in numbers to this information request. In this initial listing effort, outstanding chemical water quality and ecological significance were the primary factors that were reviewed. Upon review of the information submitted and other information available, the department is recommending the following:

1) Big Spirit Lake and West Lake Okoboji remain on the initial listing of Outstanding Iowa Waters due to their outstanding chemical water quality relative to other lakes in the state of Iowa.

2) Lake Minnewashta, Lower Gar Lake, Upper Gar Lake, and East Lake Okoboji be removed from the initial listing of Outstanding Iowa Waters due to their average chemical water quality relative to other lakes in the state of Iowa (see Recommendation #9).

3) While East Lake Okoboji is recommended to be removed from OIW listing, the department acknowledges that East Lake Okoboji does flow into West Lake Okoboji on a frequent basis. To that end, the department recommends that the East Lake Okoboji watershed receive protection equivalent to OIW for the protection of West Lake Okoboji similar to how feeder streams to OIW stream segments are proposed to be considered.

Issue: Drainage field runoff
-Restricting drainage fields gives more surface run offs.
-With no exemption for non-point discharges the farmer would face penalties even though he is trying to control field runoff.

DNR Response: This proposal does not apply to drainage fields. See Part 1, "Issue: Agricultural storm water discharges and ag irrigation return flows should be exempt from antidegradation analysis" for more information.

Issue: West Lake Okoboji is a "blue" water lake
-West Lake Okoboji is one of the three blue water lakes in the world.
-West Lake Okoboji is one of a few deep blue water lakes in the world, and is known for its clear water

DNR Response: The department has received comments over the course of this rule making effort that attempt to justify West Lake Okoboji as an Outstanding Iowa Water and even Outstanding National Resource Water because it is one of three blue water lakes in the world. Based on the information available, the department does not currently agree that West Lake Okoboji is a blue water lake. The following appeared in the Des Moines Register 4/7/1985. This question was answered by Roger W. Bachmann, professor, Department of Animal Ecology, Iowa State University, Ames.

"Blue Water Myth:

I am surprised The Register would perpetuate the myth that "The National Geographic Society says West Okoboji is one of the three largest and also one of the

most beautiful blue-water lakes in the world. The other two are Lake Louise in Canada and Lake Geneva in Switzerland", the society says. In 20 years of studying Iowa lakes I have yet to find that reference: Indeed, the National Geographic Society denies it ever made such a ranking.

While the term "blue-water lake" is not a scientific term, it is a fact that lakes and oceans with exceptionally pure waters like Lake Tahoe, Crater Lake, Lake superior and the Sargasso Sea appear blue to the eye. When sunlight penetrates these pure waters, other wavelengths (colors) of light are absorbed more strongly than blue, so that more of the blue remains to be scattered back out of the water surface.

Most natural waters, however, contain dissolved organic materials that selectively remove these blue wavelengths and thus make these lakes appear more green. The more organic matter, the less of the blue that remains to be seen. Suspended particles like silts and algae may further change the apparent lake color.

The water in Lake West Okoboji contains enough dissolved and suspended materials to make its optical properties not exceptional on a worldwide basis; however, the lake is still unique for our region. One would have to go several hundred miles to find another large, natural lake that is as deep or clear as West Okoboji. We have good reason to brag about it on its own merits."

Issue: Provide names of those against this proposal
-I respectfully request that you provide a list of anyone who is asking, pushing, or otherwise implying that Iowa needs to make anti-pollution language in any rules, guidelines, ordinances and laws less stringent.

DNR Response: Public comments submitted as a part of this rule making effort are public record and available upon request. Names of people who have provided comments are listed in the appendices of this responsiveness summary.

Issue: Discharges must not violate water quality criteria for that pollutant
-Under the proposed rule, the discharge into the states water bodies under all tiers of the program must not cause a violation of water quality criteria for the pollutant.

DNR Response: Tier 1 of antidegradation states that existing surface water uses and the level of water quality necessary to protect the existing uses will be maintained and protected. The concept that any regulated discharge of pollutants into Iowa's surface waters must not cause a violation of water quality criteria for that pollutant has implemented in Iowa for decades.

Issue: Discharges from CAFOs are temporary and limited
-The federal CAFO rule details the economically achievable best control technology for livestock farms. Because the federal CAFO rule addresses the alternatives, livestock farms should not have to do an alternatives analysis – meeting the federal CAFO rule standards should be deemed to meet the alternatives analyses requirements. Rulemaking

should consider discharges from livestock farms under NPDES permits as “temporary and limited”. Such discharges can only occur during high stream flow conditions when the volume of precipitation is great.

DNR Response: See Part 1 “Issue: Discharges from CAFOs are temporary and limited” for more information.

Issue: Pesticide applications will be individually permitted

-We as farmers would be required to have an individual review of pesticide applications, on, in, or near waters of the U.S. after EPA develops rule to implement the federal court decision. I would ask that EPC continue to allow general permit coverage of land located within the Tier 2.5 watersheds.

DNR Response: Permit requirements for agricultural pesticide application remain pending and the department can not guess as to the future requirements of any such permits or whether individual permits might be required for such applications in OIW watersheds. This issue will be addressed as the details of the proposed pesticide application permitting rules are finalized.

Issue: How does the term "community" and "importance" apply for regulated CAFOs

-The term “community” for purposes of the determining the “social and economic importance” of a rural business, is undefined in the rule. Small, rural businesses will rarely be able to meet the test if the “community” is defined as a large area and if the bar for “social and economic importance” is set high. Even if a farm only employs the family, it should be considered socially and economically important to the community if it provides income or is an integral part of a business that provides income to even one person.

-Agricultural production is still principally made up of small family businesses. This test applied to every small business could have the potential of damaging Iowa’s long term potential to provide food for our people. Even if a farm only employs and provides income for the family, it should still be considered socially and economically important. The rule should state that small rural businesses, including farms, are socially and economically important to community if it provides income or is an integral part of a business that provides income to even one person. The test as worded in the AIP is a major hurdle for rural Iowa and small businesses. We ask that it be re-drafted to clearly make the hurdle less burdensome for small businesses.

DNR Response: See Part 1,” Issue: How does the term "community" and "importance" apply for regulated CAFOs” for more information.

Issue: Why was the original list of OIWs shortened?
-I'm disappointed that this list was shortened from the original list.
-Please use the original 2008 antidegradation draft that was approved by the EPC as a Notice of Intended Action.
-How was this list of OIWs created or selected?
-These waters have not been reviewed to determine if they meet the scientific standards of Tier 2.5.

DNR Response: ARC 8038B proposed to revise the list of "Outstanding Iowa Waters" in Appendix B of the Iowa Antidegradation Implementation Procedure. The original list was based on waters designated High Quality or High Quality Resource. The basis for why those waters were chosen as HQ and HQR is not available. Additional research revealed that some of these waters aquatic life uses were listed as impaired on the 303d list. In addition to the original list not being scientifically vetted, a perceived significant regulatory impact required a review for this initial listing to ensure minimal impacts for regulated activities in these watersheds. The amendments to the list of Outstanding Iowa Waters served three main purposes:

1. ***Provide a scientific review of each water on the original OIW list and associated water quality data to determine if they were appropriately qualified to be considered OIWs based on the criteria listed in the draft Iowa Antidegradation Implementation Procedures document.***

2. ***More closely evaluate the nature of NPDES regulated facilities to determine if OIW protections would cause adverse economic impact***

3. ***More closely evaluate the nature of the impairments applicable to several highly regarded cold water streams (e.g. French and Waterloo Creeks) to determine the impairment severity and whether or not these and other streams should be added to the list.***

The amendments can be summarized as follows:

1. ***Only the cold water trout streams listed on the department's Iowa Coldwater Stream Priority Rating list that scored 3 or 4 for Water Quality Rating are currently eligible for OIW. These scores represent trout streams that exhibit consistent natural reproduction of wild trout or may serve as a brood stock source of wild trout. The Commission removed streams on the current OIW list that scored a water quality rating of 1 or 2 (this action removed 11 proposed OIWs off the original list) and added streams that received a water quality rating of 3 or 4 that were not included on the initial list (this action added 16 new streams to the OIW list). Also, some streams that scored 3 or 4 were removed due to potential significant regulatory impacts.***

2. ***Three warm water streams - Lime Creek (Buchanan /Benton Co.), Bear Creek (Buchanan/Benton Co.), and Deer Creek (Worth/Mitchell Co.) - were added***

based on exemplary scores for biological integrity, including diverse populations of mussels some of which are threatened and endangered species.

3. ***Dalton Lake is removed based on a review of the data and public comments. The Iowa Great Lakes are moving forward with intent of a more detailed review of individual great lakes through the public comment process.***

Issue: Expansion of existing sources
-Cities, farms, and business will not be allowed to increase discharges in these waters.

DNR Response: Additional flexibilities will be a part of the final rule based on public input compared to how the rule was originally proposed in October of 2008. The original proposal did not allow flexibility for existing discharges within OIW watersheds and prohibited degradation resulting from expansions. The revisions will allow expansions to occur for existing discharges, but is still protective of Iowa's outstanding resources by not allowing the cost-effective cap to be considered in the alternatives analysis. Therefore, any existing facility proposing an expansion that may degrade water quality in an OIW must select the least degrading option they can afford. This is one example of the implementation flexibilities that are possible under Tier 2 ½ that are not possible under Tier 3.

The revisions to Section 1.2 of the AIP are as follows:

The department may allow limited degradation of Outstanding Iowa Waters in three situations:

> ***1) The degradation will be "temporary and limited" as defined in Section 2.4 of this document;***
>
> ***2) The applicant documents that less-degrading alternatives are not available, that effects on existing water quality be minimal, and that the project will, overall, serve to enhance the value, quality, or use of the OIW (For example, a new or expanded source of wastewater treatment effluent associated with a visitor center may be authorized where reasonable non-degrading or less degrading treatment alternatives to allowing a new or expanded source are not available as determined through the alternatives analysis as outlined in Section 3); or***
>
> ***3) The degradation is caused by the expansion of an existing source and the applicant has conducted an alternatives analysis, selected the least degrading alternative that is "affordable" within the meaning of Section 3.2 of this document, and demonstrated the socioeconomic importance of the project as described in Section 3.3 of this document after full opportunity for public comment. In all cases, current treatment levels for existing sources should be enhanced, where possible.***

Decisions regarding whether to allow degradation in an OIW under these limited situations will be made on a case-by-case basis using appropriate techniques and best professional judgment of department staff.

See Recommendation #2

Issue: Voluntary measures should be taken first prior to regulation
-If our goal is clean water, we should be looking at education. Education in some ways would do more than regulation, it's more benign.

DNR Response: The antidegradation policy and associated implementation procedures are required under the Clean Water Act implementing regulations at 40 CFR 131.12.

Issue: Proposed additions to the OIW listings
-While we realize that additions to the list at this point are probably problematic and may further extend the process, we sincerely hope the DNR will give these streams additional consideration given the unique nature, ownership patterns and/or heavy restoration investments already made in them.
-I would like to see other rivers, such as the Upper Iowa River, added to the list. This river provides much recreation to the people in NE Iowa and to others who vacation here, or come to Luther College.

DNR Response: The department will accept nominations for Outstanding Iowa Waters and Outstanding National Resource Waters consistent with the nomination requirements listed Section 1.3 of the AIP once the rule has become effective in state administrative code.

Issue: HQ, HQW, and PWA waters should be Outstanding Iowa Waters
-To not protect these streams – which is what curtailing the OIW list further or removing it altogether would do since the present HQ designation and protection for these streams is to be removed by adoption of this Antidegradation Policy – would be a dangerous step backward: a blatant disregard for the sustainable economic benefit presently derived from these resources, a short-term perspective that discredits the sustainable economic growth that protecting these streams would provide, and a stinging rebuke of the hundreds (if not thousands) of volunteer hours and millions of public and private dollars spent in these watersheds and on these creeks to stave off further degradation and improve the fisheries and related natural communities.
-Therefore, the definitions of HQ, HQW and PWA fit perfectly with the definition of OIW and the purpose and concept of OIW. So all of those waters should be designated as OIW. We expect the responsiveness summary to these comments to state clearly and in detail on what scientific and legal basis these HQ waters were deleted. Also, there are numerous other HQ and HQR waters that were not even on the previous OIW list. We

expect the responsiveness summary will also state clearly and in detail on what scientific and legal basis these waters were excluded from the OIW list. The five PWA's were never on the list, either.
-While the decision to list these waters as High Quality was made over 20 years ago, in most cases the water quality for these waters is better today than it was in the 80's due in part to a considerable investment by state and federal agencies --as well as public and private partnerships to restore and protect these waters. Because all of these waters are designated as High Quality in our water quality standards, we believe these waters should be designated as Outstanding Iowa Waters unless information gathered by the Department or submitted to the Department establishes that these waters do not meet the criteria for Outstanding Iowa Waters in this rule.

DNR Response: The waters that are designated Class HQ or Class HQR use designations do not have any numeric criteria associated with them so one of the issues is limited to whether or not HQ and HQR waters will receive the same level of antidegradation protection. Iowa's existing antidegradation rules have not been implemented through NPDES permitting (i.e., discharging to an HQ and HQR water does not currently result in additional permitting requirements or review). The existing policy language for HQ and HQR was never implemented due to the lack of antidegradation implementation procedures as identified in EPA's letters to the DNR dated September 4, 1997 and October 5, 1999.

In 1980, the Department's position was to select only a few waters and apply Tier 2 protection. The Department's position today in 2009 is to extend Tier 2 protection to all surface waters. All surface waters including those that were previously designated as HQ will receive existing water quality protection unless it was determined that there is a need to lower the water quality because of necessary and justifiable economic or social development. The Tier 2 level of protection that seemingly afforded to HQ and HQR waters through the existing WQS will now be afforded to ALL perennial and intermittent streams with perennial pools once the new implementation procedures are effective in state rules and approved by the EPA.

The establishment of Outstanding National Resource Waters (ONRWs) and Outstanding Iowa Waters (OIWs) will provide more stringent levels of implementable protection (i.e., degradation is prohibited) than the previous HQ and HQR levels of protection.

While the Department will be removing the designated uses of HQ and HQR, it is not removing any protections of these waters. The Department will now be extending the protection that was previously determined to be only for HQ and HQR waters to all designated waters.

Part 3: Regulatory Analysis of ARC 8038B

General comments against the inclusion of an OIW Category in the antidegradation policy:

-This rule will impair economic development during a challenging time when we need job growth and the increased state revenue such growth may bring. Please delete tier 2 1/2 from this rule because neither total costs nor benefits can be quantified.
-I don't support including a tier 21/2 category in the proposed antidegradation rulemaking because of the increased cost of implementation on rural residents and business owners. The additional restrictions in tier 21/2 compared to tiers 1 and 2 aren't necessary to protect important Iowa waters.
-In plain language you are going to make it impossible (for the very people who built this fine nation)to live in rural America.
-I don't support any of this and it needs to be killed
-This is a classic example of government intruding where they are neither wanted or needed.
-We have just adopted the tier 1 & 2 categories in the proposed it is too soon to add a tier 2 1/2. It is important to measure the results of the tier 1 & 2 rule making. This will provide the information needed to make accurate & useful adjustments to the antidegradation rules.
-It would be nice for once for the DNR to listen to common sense, instead of making rules that do more harm than good. Farmers are doing a good job, maybe you people should check the towns and cities for pollution.
-In a time of declining state receipts and a struggling state economy, including a restrictive tier 2.5 review does not generate more calculable benefits than costs. Despite the length of the analysis, the analysis only made a good faith attempt at providing quantitative numbers for three partial items impacted by the discretionary inclusion of the tier 2.5 reviews. The analysis failed to comply with the spirit and substance of Iowa Code 17A.4A with its repeated findings of "impossibility". If estimating the total costs and benefits is truly impossible, it would be a poor public policy decision to move ahead with this portion of the rule in this declining state economy based on speculative benefits. Protecting our current water quality is a good goal; however, this goal must be balanced with the need for economic recovery and growth. The Tier 2.5 review will serve to handicap Iowa's economic recovery effort and therefore, should be abandoned.

DNR Response: Specific concerns are addressed below.

General comments for the inclusion of an OIW Category in the antidegradation policy:

-Please keep Outstanding Iowa Waters in the proposed antidegradation rules.
-OIWs represent some of the last high quality waters that can never be replaced.
-I think there is an economic benefit to maintaining high quality waterways in Iowa. We need to attract and retain young people.

-I urge you to keep the category of Outstanding Iowa Waters in the proposed Antidegradation rules and that the 6 lakes in Dickinson County and the 32 high quality streams in NE Iowa, currently nominated in the DNR rules, maintain their designation as OIW waters in this initial rule-making.
-Please do all you can to be sure the DNR and the Administrative Rules and Review Committee of the Iowa Legislature know that Iowans like me want protection for these 38 gems through the designation of Outstanding Iowa Waters.
-I am writing to ask you to protect Iowa's great lakes and pristine streams by creating "Outstanding Iowa Waters." (Iowa Administrative Code 567 Chapter 61).
Protecting unpolluted waterways is important to our state's natural heritage as well as our tourism and recreation industries we can't afford to let these pristine waters be damaged by pollution. I am proud to be an Iowan, and in some interpretations Iowa means Beautiful Land: Lets keep it that way. A healthy place for Humans/land animals and water living beings.
-Let's do this just simply because it is right/don't let greedy big farmers continue to pollute out water.
-We need an Outstanding Waters category in our campaigns to improve Iowa's waters. People from around the state will want action that improves their local streams and allows them to reach for a high standard.
-When Iowa takes this much needed step to recognize and protect these Outstanding Iowa Waters, it will result in increased tourism and recreational use which will greatly benefit local and state economies.
-I am very concerned about the poor quality our waters here in Iowa. We have spent decades using and abusing our resources without spending the money we need to in order to protect them. I am frankly amazed that there still are such beautiful creeks and lakes still in existence in the state.
-I strongly believe we need to protect these pristine areas. We need to learn how to be good stewards of the natural gifts that have been given us. And what we learn here might help us start to clean up the waterways that so many of us here in Iowa depend on for drinking water.
-Corn and soybean crops have up-years and down-years and confined animal feeding operations can be setup anywhere. Industry will proceed as cheaply as they can to insure best profit margins. However, once these industries pollute an area, it may never fully recover. Our children and their children will have their own struggles and we cannot, in good conscience limit their tools, resources and what's left of Iowa's natural environment, to pad our pockets, right now, non-sustainably. Protecting unpolluted waterways is important to our state's natural heritage as well as our tourism and recreation industries we can't afford to let these pristine waters be damaged by pollution.
-It is well known that our society tends not to value resources unless they can be extracted from the earth and turned into some product. These streams and lakes ARE a product that can bring recreational, development and tourism dollars... but only if we protect them NOW. The cost associated with these proposed protections is small (not to exceed $50,000 per year). On the other hand, the VALUE of protecting these watershed and waterways now, while we can, is priceless. What will it cost to repair damages later on? Please take the need for conservation and stewardship seriously, and do not allow

profits for a few to decimate these waters which represent the common wealth of Iowa. The legacy of Iowans from one generation to another depends on it.
-Simple...keep the waters protected and clean. According to the current issue, this is a relatively inexpensive thing to do now. Ben Franklin said it best..." a stitch in time saves nine". What will this cost for our children and grandchildren?
-This is another area where the economy benefits greatly from its pristine waters. These special waters need the state's protection.
-The Floyd River (NW Iowa) is no longer an outstanding water, but it once was. Here is an excerpt from the "Story of Sioux County by Charles L. Dyke, 1942," which refers to his childhood memories of the river before 1881. "The Floyd River was then a gem of purest water on the immaculate bosom of mother earth. It was ten feet deep, or even deeper in places and the water was so clear that when we dropped a white bean in it we could see it settle on the sand and gravel bottom. It abounded with game fish like pike and pickerel, sun fish and bullheads, and the most delicious of all fish, the brook trout." Clear, clean water shouldn't just be something we read about in history books. Please act to protect the Outstanding Waters of Iowa from further degradation.
-the cost or burden of protection should fall on those who would pollute, and must not be at the expense of our natural resources.
- We support the inclusion within these rules of a list of waters to receive the OIW designation that includes many of the waters designated as High Quality waters in Iowa's current water quality standards. These proposed waters consist 112.39 stream miles which is 0.16% of Iowa's stream miles 11,775 lake acres, which is 7.3% of Iowa's lake acres.
- In comparing how our neighboring states implement this added level of protection, Wisconsin has designated many of the state's highest quality waters as Outstanding Resource Waters (ORW) or Exceptional Resource Waters (ERW) in their state Antidegradation rules. Wisconsin designates 357 waters as ORW and 1544 waters as ERW, for a total of 1901 waters with additional protections (ORW or ERW). Minnesota has designated many of the state's highest quality waters as Outstanding Resource Value Waters (ORVW) in their state Antidegradation rules. Included in this list are waters within the Boundary Waters Canoe Area Wilderness and Voyageur National Park; Lake Superior; Mississippi River from Lake Itasca to the south border of Morrison County; 13 State Designated scientific and natural areas; 2 State designated wild river segments; 7 State or federal designated scenic and recreational river segments; and 73 fens. Missouri has designated 43 of the state's highest quality waters as Outstanding National Resource Waters (ONRW) or Outstanding State Resource Waters (OSRW) in their state Antidegradation rules. Both of these designations are considered Tier 3 and any permanent lowering of water quality is prohibited.
- clean water is priceless and that's how we should treat it
- protecting high quality waters with Tier 2.5 status is economically important for the State of Iowa. Without clean water, communities in the northeast Iowa and the Iowa Great Lakes region risk losing a significant source of their local revenue. The entire state is also at risk of losing a valuable economic resource that simultaneously provides Iowans with exceptional ecological, scientific, social and cultural opportunities.
- While the adoption of the proposed anti-degradation regulations and the resulting Outstanding Iowa Waters designations are not a "cure all" to the challenges facing

organizations working to improve Iowa's fish habitat and fishing opportunities, they are a vital first step in addressing some of the fundamental challenges we face in attracting increased investment to Iowa. If adopted, we feel that the amount of new investment that can be attracted is significantly higher than any costs that can be identified as associated with the implementation process. More importantly, the long-term impact of increased trout tourism at a demonstrated 10x rate of return for each dollar invested in improvements provides the possibility for a substantial recurring increase in local tourism, and the associated revenue generated for small businesses and communities in the Driftless area of NE Iowa where the proposed streams are located. Adoption of the anti-degradation regulations and introduction of the Outstanding Iowa Waters designation is a critical first step to creating the environment needed to spur this growth.

Benefits identified by commenters:

-In fact, Iowa tourism data demonstrates the economic benefits these high quality waters are currently providing locally and at a state level: * Research compiled by the Travel Industry Association of America indicates tourism was a $173.18 million dollar industry in Dickinson County (Iowa Great Lakes area) in 2005. The tourism industry creates $25.38 million dollars in payroll affecting 1,770 employees throughout Dickinson County.

-It also creates $10.41 million dollars in state tax receipts and $3.6 million dollars in local taxes. Since 1997, according to the hotel/motel taxes collected, the Lakes-area tourism has experienced steady growth. * The trout streams of the Driftless Area of Iowa, Wisconsin, Minnesota and Illinois are considered a national treasure by anglers and are listed as within a critical ecosystem in need of protection and restoration by EPA. Recreational angling in the Driftless Area generates $1.1 billion in annual economic benefits. $647 million of this total goes directly into the local economy from spending on food, lodging travel, supplies and entertainment. The remaining $465 million represents the indirect and induced spending referred to as the "ripple effect" from economic activity stimulated by the direct spending (source: The Economic Impact of Recreational Angling in the Driftless Area by Trout Unlimited and NorthStar Economics, Inc.).

-In Wisconsin and Minnesota the trout season lasts only from March or April to the end of September. But in Iowa the trout season lasts all year. Every fall Iowa benefits from tourism from adjacent states coming to Iowa to fish for trout. This is an important and unique resource to protect. Unfortunately Iowa lags behind our sister states of Wisconsin and Minnesota in stream protection and restoration of these trout streams. If Iowa takes this much needed step to recognize and protect these Outstanding Iowa Waters, it will result in increased tourism and recreational use which will greatly benefit local and state economies.

-I believe that the recreational and intangible benefits of having these waterways protected far out- weighs the negatives. Iowa can benefit tremendously from protecting some of its waterways.

-High quality waters are important to our economy: An estimated 11,479 jobs, $242.9 million of income and $424.9 million of gross state product are associated with the spending by visitors to Iowa lakes

-Recreation is important to Iowa: More than 25 million visits are made to Iowa state parks and lakes annually.
-Clean water is critical to world-class trout fishing in Northeast Iowa and to other fish, waterfowl, reptiles and amphibians.
-Enhanced habitat protection will also help ensure that future generations continue to enjoy Iowa's outstanding natural resources.
-We often hear there is a choice between environmental protection and economic development. This is a false choice. They need to work together. There is no resource more important than skilled labor. Attracting skilled labor with the education necessary to drive the future of our Iowa economy requires at a minimum clean air and clean water.
-It is our understanding that antidegradation review is triggered by applications from industries and municipalities for new wastewater discharge pollution permits (NPDES permits) and other applications for permits to conduct activities that may degrade water quality including storm water permits for construction sites and permits from the Army Corp of Engineers for the filling or altering of wetlands. If our lakes are listed as "Outstanding Iowa Waters" maybe a "Bridges Bay" type disaster, where storms washed tons of soil into East Okoboji due to inadequate silt fence and storm water control during construction, could be prevented by greater scrutiny before construction begins. Also, this may help prevent wetlands from being filled in without anyone's knowledge.

-Recognition and protection of the best of these trout streams as Outstanding Iowa Waters should serve to increase the reputation of these streams as quality trout streams and attract even more tourism to the area. As of now, Iowa lags behind our sister states of Wisconsin and Minnesota in stream protection and restoration of these cold water trout streams. In 2006 Iowa received a total of $7,648,962 in retail sales and a total of $748,083 in state and local sales tax revenue from trout anglers. Trout anglers spent a total of $6,589,500 in travel related expenditures in 2006 as well. If Iowa takes the much needed step in preserving our highest quality trout streams, Iowa could significantly increase this tourism generated revenue from resident and non-resident anglers.

-We feel that the benefits of having Outstanding Iowa Waters were perhaps underrepresented in particular, the value of real estate as relates to trout stream real estate is extremely high and I mentioned that about three hundred yard segment of Village Creek, if you want to purchase both sides of the stream would cost about three hundred thousand dollars. Village Creek is thirteen miles long, so you can do the arithmetic, if even a portion of that land comes up for sale, to trout enthusiasts, you see the potential for a huge benefit related to the fact that it is an Outstanding Iowa Trout Stream, and if it does not have OIW protection then you risk the possibility that an industry or municipality could locate in the headwaters and reduce the quality of that water to the point where it was no longer, well it might still be a trout stream, but it would no longer be valued at three hundred thousand dollars per quarter mile. So I would like to see if the rate analysis is reopened, some emphasis placed on the value of the trout streams economically.
-It's more than just do I own land there, did I go fish there this weekend, it's about having it there for your next generation and the generation after that. And having the memories of it that keep you warm when you're out doing yard work and fixing old cars instead of going fishing.

- Each of these issues is impacted by the Anti-degradation provisions generally, and the Outstanding Iowa Waters designations in particular. Overall, the establishment of anti-degradation procedures and the commitment to Outstanding Iowa Waters designations is a critical first step to improving not only the fisheries and the resulting tourism income, but the investment by public and private entities in stream improvements that will further increase the economic return.

-By our estimates, the simple failure of the state of Iowa to provide even a basic expression of long-term commitment to these streams in the form of Outstanding Waters Designations costs the state of Iowa several million dollars in public and private conservation investment annually – and the resulting tourism that follows such money. Minnesota and Wisconsin each see approximately 3 to 4 times such investment per mile more than their Iowa counterparts, even given the much larger total mileage of fishable trout streams in each state. The Outstanding Iowa Waters designations, and the anti-degradation commitment that accompanies them, represents a solid step toward allowing Trout Unlimited, the IDNR and other organizations working on stream improvements to claim a greater share of those funds and direct them to Iowa watershed projects.

-We have been working to identify needed changes to easement policy and sate approaches that are necessary to attract increased investment to the state. While the research is on-going, initial findings have determined that the lack of an identifiable, long-term commitment to preserve and protect designated streams is a significant barrier to landowner adoption of easements and community interest in supporting them. Once again, the adoption of the Outstanding Iowa Waters labels and resulting state commitment will prove a valuable tool in overcome these barriers and increasing the level of investment in Iowa natural resources.

-The Outstanding Iowa Waters designation and commitment to anti-degradation in designated streams will provide outside groups such as Trout Unlimited a basic framework in which to develop, propose and sell public investments within a limited scope of waters the state has shown a commitment to protecting. Additionally, once such waters are designated, it provides a solid foundation for Trout Unlimited and other groups to work with the IDNR to help expand planning further, and to develop the full range of long-term strategies and goals necessary to attract additional funding.

DNR Response: The department attempted to characterize the benefits of the protection that Tier 2.5 or OIW affords, not necessarily the value the resources it is intended to help protect. The department did not analyze the benefits listed above, but recognizes the value of Iowa's outstanding surface water resources.

Specific Issues:

Issue: Why implement this?
-I understand the EPC cannot estimate the total costs or benefits of this rule so why implement it?
-The EPC regulatory analysis highlighted one clear, consistent theme: the impacts of this proposal are unknown. However, EPC acknowledges that the proposed rules would cause "increased costs for individual permitting vs. general permitting, additional department staff time for review of nominations for OIWs, additional department staff time to issue individual permits, and potential loss of industrial growth within OIW watersheds." Based on these known costs and the EPC's admitted uncertainty of other costs and benefits associated with this proposal, IRFA finds it difficult to justify voluntarily subjecting Iowa families and businesses to a policy that is much more restrictive than federal requirements.
-the proposed antidegradation rules will (1) create an economic strain on Iowa and Iowa businesses at a time when Iowans cannot afford additional economic pressure, considering the current state of the local and national economy; (2) stifle industry and economic growth in the State of Iowa without providing clear costs and benefits to Iowans and Iowa waters during a time of economic strife; (3) increase costs to the State of Iowa and allocate state resources even more sparsely than they are currently; (4) and impose strict limitations on Iowa businesses and industry that go well beyond the requirements of the federal Clean Water Act and beyond the scope that many other states have successfully adopted. Since EPC cannot state with any certainty the potential benefits of these rules, this proposal has the potential to cause "all pain and no gain" for Iowa families and businesses.

DNR Response: From the department's perspective, the ability to afford a level of protection that recognizes and attempts to preserve Iowa's truly remarkable surface water resources is needed and long overdue. Examination of the chemical, biological, and physical characteristics of Iowa's surface waters reveals that there are very few waters that exhibit exceptional quality. Some of those that do have exceptional quality show declining trends. The Outstanding Iowa Waters category in this rule proposal presents a unique opportunity to afford a level of protection commensurate with the caliber of waters listed in this proposal. As discussed in the regulatory analysis, this initial group of OIWs is intended to have a minimal economic impact on regulated activities.

(see " Issue: This is not required by federal law" for additional justification)

Issue: This is not required by federal law
-This part of the rule not required by federal law. Federal law is restrictive enough to protect our waters.

DNR Response: The Code of Federal Regulations (40 CFR §131.12) requires that states adopt a minimum three tier antidegradation policy. Tier 1 maintains existing

and beneficial surface water uses, Tier II maintains existing water quality unless a review of reasonable alternatives and social and economic considerations justifies a lowering of water quality, and Tier III prohibits degradation. However, EPA guidance allows for a Tier between Tiers II and III, commonly referred to as Tier 2 ½, that recognizes individual states may have waters that warrant special protection, but do not warrant a complete ban of any and all degradation.

Since Tier 2 ½ falls between Tier 2 and Tier 3, the level of protection is greater than Tier 2, but not as restrictive as what is required in Tier 3. Tier 2 protection is afforded to all surface waters where existing water quality is better than applicable water quality standards as determined on a pollutant-by-pollutant basis. Tier 2 protection allows degradation only if a review of reasonable alternatives and social and economic considerations justifies a permanent lowering of water quality or the lowering of water quality is temporary and limited.

Tier 3 protection prohibits any lowering of water quality unless it is temporary and limited, as determined by the Director of IDNR on a case-by-case basis. Any proposed activity that would result in a permanent new or expanded source of pollutants is prohibited. This is a very high level of protection with no flexibility available under 40 CFR §131.12.

The department recognized that very few waters in Iowa, if any, could be considered outstanding on a national level in the context and framing flexibilities of the antidegradation policy. However, the department also recognized that there are waters of exemplary quality when compared to other waters across Iowa. While not federally required, the allowance for this intermediate Tier 2 ½ in EPA guidance offered the unique opportunity to provide an additional level of protection to help preserve Iowa's outstanding surface water resources while providing more implementation flexibility. Another benefit of Tier 2 ½ is that it allows for waters to be added or removed from the list without requiring the approval of the Environmental Protection Agency (EPA).

Throughout the rule making effort, there have been suggestions to eliminate the Tier 2 ½ category altogether in favor the federally required three tier system. Designating Outstanding Iowa Waters as Outstanding National Resource Waters would afford more protection for these waters by prohibiting degradation and removing the implementation flexibilities afforded by Tier 2 ½. Since Tier 3 is federally required any modification to the list must be approved by the EPA.

Additional flexibilities will be a part of the final rule based on public input compared to how the rule was originally proposed in October of 2008. The original proposal did not allow flexibility for existing discharges within OIW watersheds and prohibited degradation resulting from expansions. The revisions will allow expansions to occur for existing discharges, but is still protective of Iowa's outstanding resources by not allowing the cost-effective cap to be considered in the alternatives analysis. Therefore, any existing facility proposing an expansion that may degrade water quality in an OIW must select the least degrading option they can afford. This is one example of the

implementation flexibilities that are possible under Tier 2 ½ that are not possible under Tier 3.

Issue: Is there and proven hard and fast evidence that by imposing these new proposed rulings that it will definitely improve the water quality?

DNR Response: Antidegradation provisions are not intended to improve water quality. Antidegradation provisions are intended maintain and protect existing water quality and high quality waters from unnecessary pollution. That being said, other commenters have argued the category Outstanding Iowa Waters will help secure funding to help improve trout streams as it represents a long term public commitment to protecting certain surface water resources in the state.

Issue: New waters added to the list of OIWs

- Other uncertainties of concern in the EPC analysis include the unknown number of additional waters that may be added to the list of OIWs, as well as the uncertainty with which OIW watersheds—and the recognized elimination of industrial growth within them—will be determined. While EPC does not expect the current list of proposed OIWs to cause significant economic impacts, EPC acknowledges that "there are several additional waters being proposed as OIWs." New waters added to the current list of 32 streams and 6 lakes designated as OIWs could significantly change the EPC's already uncertain economic impact estimates.

-The regulatory analysis states that hauling costs for rock may increase however this is not expected to be significant due to the relatively small size of the drainage areas of the proposed OIW's. True enough. However, the reader needs to consider the larger picture. First, reading further on, the regulatory analysis notes that additional waters may be added to the list of OIW waters. We believe it would be more correct if it said "additional waters will almost certainly be added".

-The long term consequences of allowing additions to the Tier 2 ½ review in the rule were not described or considered in the analysis. The future size of the drainage areas impacted by the proposed OIW will increase over time as the waters are added.

DNR Response: The economic impacts of classifying additional waters as OIW is best determined at the time they proceed through future rulemaking efforts and therefore was not analyzed in the regulatory analysis. There is no way to determine how many waters will be nominated and successfully categorized as Outstanding Iowa Waters in future rule making efforts. The regulatory impact focuses on the scope of the current rule proposal.

Issue: OIWs must be vetted

-In addition, costs to OIW watersheds in lost economic development are almost impossible to quantify, as noted by DNR in the analysis. Careful vetting of additional waters added to this list will be critical, as the future effects of listing additional waters as

OIWs must be weighed carefully against the effects on future economic development in communities across the State.
-Not only is there no scientific basis for the current listing of 45 waters to the tier 2 ½ list but there are no scientific requirements identified in the nomination process when private citizens nominate a stream for a tier 2 ½ designation. We ask that there be a moratorium on designating any streams as tier 2 ½ until clear scientific protocol as been produced outlining what water qualities are necessary for a tier 2 ½ designation and a justification procedure to ensure that designated waters meet the outlined scientific criteria.

DNR Response: The department has bolstered the nomination and review criteria for Outstanding Iowa Waters and Outstanding National Resource Waters in the final rule to address these concerns as follows:

"Using a weight of evidence approach, the department may classify a surface water as an OIW or ONRW based on a combination of the following criteria:

- ***Location of the surface water (e.g. on federal or state lands such as national parks or national wildlife refuges);***
- ***The surface water has exceptional water quality as demonstrated by credible chemical data, the documented maintenance of pollutant intolerant species, or other data available to the department;***
- ***The surface water is of exceptional ecological significance because of its unique attributes as demonstrated through detailed aquatic community assessments, population surveys, or other data available to the department;***
- ***The surface water is of exceptional recreational significance because of its unique attributes as demonstrated by detailed information highlighting economic benefits, number of users relative to other similar waters, and exceptional water quality demonstrated by credible water quality data, or other data available to the department;***
- ***The surface water supports threatened or endangered species or provides critical habitat for a state or federally threatened or endangered fish, mussel, or aquatic invertebrate species; and/or***
- ***The surface water is highly aesthetic; has archeological, cultural, or scientific importance; or provides a special educational opportunity.***

If the department determines that the classification of a surface water as an OIW and ONRW may be appropriate based upon the criteria described above, the department will then consider the following factors when making a decision whether to classify a nominated surface water as OIW or ONRW:

- ***Whether there is the ability to effectively manage the OIW or ONRW and its watershed to maintain and protect existing water quality;***
- ***The social and economic impact that will result from Tier 2 ½ or 3 antidegradation protection;***
- ***Public comments in support or opposition to the OIW or ONRW classification;***

- ***The timing of the OIW or ONRW nomination relative to the triennial review of surface water quality standards;***
- ***The consistency of an OIW or ONRW classification with applicable water quality management plans;***
- ***Whether the nominated surface water is located within a national or state park, national monument, national recreation area, wilderness area, riparian conservation area, wildlife management area, area of critical environmental concern, or has another special use; and***
- ***Any other factors the department considers relevant when making a decision whether to classify a nominated surface water as OIW or ONRW.***

The criteria and factors listed above to classify and reach a decision for OIW and ONRW nominated waters are the same. However, the weight of each criteria and factor will be considered differently depending on which Tier (OIW or ONRW) the nomination specifies since the corresponding protection levels are different. In the case of an ONRW nomination, more information will be required in addition to the requirements listed above to demonstrate the water body's importance to the nation, not just Iowa. Comparison of ONRWs from across the country including highly detailed data for water quality, ecological significance, recreational significance, criteria used for ONRW categorization, and any other unique factor appropriate in demonstrating national significance must be submitted.

If the department concurs with the nomination of an OIW or ONRW, the department shall hold at least one public meeting in the local area of a nominated OIW or ONRW to solicit public comment. The nomination and all other information or input collected during the nomination and consideration process will be made part of the public record. Any changes to the list of OIW or ONRW waters need to proceed through the rule making process as prescribed in the Administrative Procedures Act."

See Recommendation #3.

Issue: The analysis fails to clearly designate how OIW watersheds will be treated in the proposed rule.

-The analysis gives an example of "a wastewater treatment plant that discharges indirectly to an OIW stream through 20 miles of unnamed stream tributaries" and concludes that "each pollutant and discharge scenario can be different and will need to be closely examined to determine if degradation in the OIW may actually occur." The analysis leaves open the possibility that waters 20 miles or more away from an OIW may be subject to the restrictions of this proposed rule. The potential economic impact of these "decisions to be made later" cannot be ignored by Iowa families and businesses. Will any stream segment ultimately be left out of direct or indirect OIW restrictions—restrictions not required by federal law?

-The impacted area is broader than just the segment of stream that is listed for additional protection under Tier 2.5. It also includes water bodies that drain to that listed segment.

This expands the potential negative impact to dischargers beyond the listed stream segment.

DNR Response: The regulatory analysis was performed in a conservative manner. Impacts on all regulated activities within the watersheds were analyzed, not simply on direct dischargers to these OIW stream segments. The implication that ALL streams in Iowa will be subjected to OIW protection is unfounded. The geographical scope of the current proposed list is clearly identified in the support materials available on the DNR's web site at http://www.iowadnr.gov/water/standards/antidegradation.html

Issue: Impact on small communities
-We are concerned that the regulatory analysis does not accurately reflect the potential financial impact to Iowa's small communities. The inclusion of Tier 2.5 goes far beyond what is required by the Environmental Protection Agency and has the potential to become an open-ended list with negative impacts on city growth and economic development. This potential impact does not seem to be addressed in the regulatory analysis completed by the Department.

DNR Response: No communities are expected to be adversely impacted by this proposal and therefore were not analyzed.

Issue: New flexibilities of OIW
-The Department states that it is nearly impossible to accurately quantify the financial impact of the creation of the Tier 2.5. We believe that nearly every project will have, at a minimum, a 115% cost increase based on the Department's own guidance that says that it will consider increased costs up to this limit affordable. We recognize and appreciate that the Department is proposing some increased flexibility within the Tier 2.5 category but until this is finally adopted, it is difficult to determine what relief this will provide those communities and businesses located within the drainage area of a listed stream segment.

DNR Response: The flexibility identified by the commenter will apply to existing communities and industries within OIW watersheds. Currently there are no regulated permanent wastewater discharges from municipalities or industries in these watersheds. As a result, this flexibility will apply if and when a new water is categorized as an OIW through the state rule making process and has permanent wastewater discharges from municipalities or industries that are proposing to expand.

Issue: Quarry Dewatering in OIW
-The regulatory analysis addresses some of our earlier concerns in regards to de-watering a quarry. Specifically, it states de-watering may be possible if "effluent water quality is better than or equivalent to the ambient water quality consistent with the provisions in the AIP…" If it is not, "then this activity would not be allowed to occur…." You have also

included an alternative analysis that was not in the original rule that may allow a form of degradation if less degrading alternatives are not available. We applaud these efforts to work with industry while still maintaining water quality, but we are still not clear on what constitutes degradation. The concern is that the Implementation Procedure still refers to mass-loading, i.e. new or increased mass loading of any pollutant of concern. So, as we have discussed before, the addition of even one molecule of a pollutant is an increase in that pollutant regardless of the assimilative capacity.
-We would also expect the groundwater seeping into our quarries to be comparable or of better quality than the ambient water. But even then, the regulatory analysis only says it "may be possible to locate a new quarry in these watersheds". There are lots of unanswered questions.

DNR Response: The determination of whether quarries could be located in an OIW watershed is dependent upon the water quality of any proposed discharge when compared with the water quality of the groundwater collected in the quarry. Because the stream and the quarry often have the same water source, i.e. groundwater in the area, there is a significant potential for the discharge water to be of equal or better quality which would mean that the discharge would not constitute degradation. Increased flows can be seen as a beneficial impact of discharge where the discharge water quality is sufficiently high.

If a quarry can demonstrate that the water that will be discharged is of equal or better quality than the ambient water, then the quarry will be able to locate in OIW watersheds. The department recognizes the conservative nature in which degradation is identified thus requiring alternatives analyses (i.e., a new loading of a pollutant of concern triggers Tier 2 review). Under this approach and absent a de minimus exemption, this will catch certain regulated activities where the resulting pollution is widely considered to be negligible. To that end, while a new quarry will result in a permanent new source of pollutant loading to an Outstanding Iowa Water the quarry can still be allowed if it 1) conducts an alternatives analysis and 2) demonstrates that the effects of the discharge will either improve or maintain the ambient water quality conditions in terms of concentration for the pollutants of concern along as the pollutants of concern are not bioaccumulative. This is consistent with the provisions of AIP in section 1.2 that states "the applicant documents that less-degrading alternatives are not available, that effects on existing water quality be minimal, and that the project will, overall, serve to enhance the value, quality, or use of the OIW".

Issue: Tier 1, TMDL, and antidegradation
-Second, many other regulations are also impacting our industry. For example, TMDL restrictions on major sections of the Cedar, Des Moines and Raccoon River watersheds are already in place. These TMDL restrictions completely prevent new quarry operations in major areas of Iowa. They do so by preventing any new discharge containing even one molecule of nitrate within these watersheds. We would caution both legislators and regulators that continuing to approve these well meaning, but overlapping regulations will eventually make it economically impossible to produce the aggregate Iowa needs to

grow and prosper. Independent of one another, they seem logical and beneficial. But the combined impact is impossible to assess.
-DNR is unlawfully categorically banning new or expanded discharges to impaired waters – Tier I Review. Available provisions in current federal law and court cases for instances where discharges into impaired waters should be allowable under our anti-degradation policy.

DNR Response: A proposed new or expanded discharge of a pollutant of concern into a water body that is impaired for the pollutant of concern in question would be prohibited under the requirements of the TMDL and NPDES permit. This situation is recognized in the AIP in section 1.2 that states "Tier 1 review shall prohibit degradation that may cause or contribute to the impairment of a beneficial use". If the discharge is prohibited, then it would be prohibited even if the antidegradation provisions did not exist.

Issue: Septic Systems and OIW
-The EPC failed to make a good faith effort to comply with Iowa Code 17A.4A(2) or (3) in its estimates of the total costs of ARC8038B on class of persons who own or will own private septic systems. Because the quantitative impact on the class of affected persons with new or out of compliance septic systems were not described, the analyses falls short of statutory requirements.
-Also these rules will affect the sale of acreages and lots for people to buy and build homes on in rural areas since they will also affect septic systems as stated in the proposal. Right now Iowa doesn't need more rules like this to further depress the land prices and development of land not suitable for cropping. It can also affect the farmer himself should he want to build a new home or expand his operation to include his sons or daughters.

DNR Response: The comments improperly equate the need to replace or upgrade an onsite wastewater system with the creation of a new or increased discharge to which an antidegradation analysis is applicable. The Department's recently adopted Time of Transfer Inspection rules, which implement Senate File 261, and require existing systems that are defective to be replaced or upgraded at the time of the sale of the property. These will <u>not</u> be new discharges and will be decreased pollutant discharges in virtually all situations. Therefore it is inappropriate to include costs related to these upgrades when calculating the fiscal impact of the Tier 2 ½ category.

Additionally, the comment presupposes that any new systems would be discharging systems but for the Tier 2 ½ designation. The primary determining factor for whether an onsite wastewater system will be a discharging or non-discharging system is the geology of the site. Non-discharging systems with leach fields are the most common and cheapest alternative. Approximately 80% of the private onsite wastewater systems in Iowa are non-discharging systems. In the areas of the state where the proposed OIW waters are located, the percentage would be higher.

It is these non-discharging systems that form the basis for the cost estimate of $6,300 per system as reported in the fiscal impact statement for the Time of Transfer Inspection rules. The fact that the Department has only identified two discharging onsite systems in the proposed OIW segments supports the assertion that non-discharging conventional systems can be installed in the proposed OIW watersheds. Therefore it will be rare that the OIW classification will increase the cost of the installation of a new or expanded system.

If soil type, water table, or other geologic factors do not allow for the installation of a properly functioning conventional soil absorption system for a new home or building in a Tier 2 ½ watershed then another non-discharging system, such as a mound system, will need to be installed. While the Department could estimate the number of existing systems that will need to be replaced in the proposed OIW segments, this information is not relevant to a determination of the regulatory impact of the assignment of an OIW classification because these will not be new or expanded discharges. The difficulty, as noted in the regulatory analysis, is in determining the number of new homes or businesses that will decide to locate in these areas and that will have the rare circumstance of not being able to install a conventional below-grade leach field. In addition, discharging systems are only considered a CWA regulated activity if they reach a designated water of the state. This could mean that certain discharging systems are allowable in Tier 2 ½ watersheds depending of site-specific conditions.

The Department's regulatory analysis constitutes a good faith effort to comply with the requirements of section 17A.4 of the Code of Iowa.

Issue: Water well construction and OIW

-The regulatory analysis fails to estimate the cost or benefit of this rule on the construction of new water wells. The EPC has promulgated rules to require NPDES permits for discharges from new well installations. It is reasonable to anticipate that new water well construction will be affected by the imposition of tier 2 ½ designations. No effort has been made to quantify the increased costs or benefits from imposing these additional restrictions, including individual permits, on the construction of new wells on lands impacted by the Tier 2 ½ designations.

-The regulatory analysis did not make a good faith effort to discuss whether the impact of the rule could be reduced on small businesses. For example, the EPC does not have to require more expensive individual permits for well construction, storm water discharges or pesticide applications. Neither EPA's regulations nor guidance documents require individual permits compared to the streamlined general permits.

DNR Response: The Department is in the process of adopting a general permit for discharges related to water well construction. The proposed general permit does not require the payment of a fee.

Under a Tier 2 ½ antidegradation analysis, temporary and limited degradation may be allowed. Discharges related to well construction should be temporary and limited by definition. The classification of a water as an OIW should never result in the prohibition of the construction of a new water well. The Department does not intend to require individual permits for these temporary and limited discharges to an OIW.

One comment states "It is reasonable to anticipate that new water well construction will be affected by the imposition of tier 2 ½" but fails to identify how such water well construction will be affected. The Department has not identified any impact on water well construction and the regulatory analysis constitutes a good faith effort to comply with the requirements of section 17A.4 of the Code of Iowa.

Issue: No consideration was given to the environmental impacts of requiring longer transportation routes for raw materials for construction and maintenance projects.

DNR Response: The regulatory analysis considered this impact. The analysis stated, "If it is shown that unacceptable degradation may result, then this activity would not be allowed to occur to protect Iowa outstanding water resources. This may require the raw materials, like crushed limestone rock, to be quarried outside the OIW watershed and hauled in for projects. This may increase the cost of projects within these watersheds due to increased hauling costs of importing the raw material from quarries outside the watershed; however this not expected to be significant due to the relatively small size of the drainage areas of the proposed OIWs".

Issue: Small business impact and OIW

-The proposed antideg rule, including Tier 2.5 review, will have an impact on small businesses, including farms. Approximately 115,000 tillable acres are included within the proposed Tier 2.5 watersheds. Land located in these areas will have to obtain individual storm water permits for new construction larger than an acre. NPDES permits for commercial truck washes, certain truck washes, rural business and industries that discharge will also be required in this watershed. In the future, farmers will also likely have to obtain permits to apply pesticides in, over or near navigable waters of the United States absent a successful appeal to the US Supreme Court. The regulatory analysis does not include an estimate of the total increased costs from this rule because of (1) increased consultant costs for preparing and coordinating the permit process for the applicant, (2) construction delays caused both by individual permit review and by increased engagement of outside groups; and, (3) requirements for more expensive control technologies for permit applicants, including small businesses. The analysis also does not describe or account for increased litigation risk and expense for the permit applicant made possible by individual permit review which is not otherwise required.

-The regulatory analysis lacks clarity about the impacts of the proposed rule on livestock farms which are required to obtain an NPDES permit. Storm water run-off from agriculture is exempt from Clean Water Act 402 permit jurisdiction under both the federal CAFO rules and the Waterkeepers decision. The regulatory analysis states that

"A non-discharging CAFO would be allowed in OIW watersheds" Agricultural storm water discharges are also non-regulated agricultural storm water discharges in a tier 2.5 watershed.
-The regulatory analysis did not make a good faith effort to discuss whether the impact of the rule could be reduced on small businesses. For example, the EPC does not have to require more expensive individual permits for well construction, storm water discharges or pesticide applications. Neither EPA's regulations nor guidance documents require individual permits compared to the streamlined general permits.

DNR Response: One comment details the exemption from regulation provided by the Clean Water Act for agricultural storm water runoff. The proposed antidegradation rule does not contradict this exemption and does not propose additional best management practice controls for agricultural practices beyond those controls established by other provisions of the Code of Iowa and the Iowa Administrative Code. The regulatory analysis can not, and should not, address costs not intended or anticipated to be imposed. The remainder of the comment raises potential impacts that may or may not occur. The determination of whether to retain a consultant to prepare individual permit application documents is wholly within the control of the applicant. The potential for engagement by third parties in the permitting process and the potential for incurring litigation costs are wholly speculative. These risks exist regardless of whether a stream is formally determined to be an OIW or is simply deemed by interested parties to be a stream of significant importance to Iowa. Litigation in regard to permit requirements for agricultural pesticide application remains pending and the department can not guess as to the future requirements of any such permits or whether individual permits might be required for such applications in OIW watersheds. The Department has made a good faith effort to address reasonably quantifiable impacts.

Issue: The OIW proposal is already helping in NE Iowa
-In preliminary surveys of participating landowners and county conservation officials applying for funds, the publicity and public education generated by the Outstanding Iowa Waters initiative was instrumental in attracting landowner interest. Several county conservation managers noted that the commitment to anti-degradation processes significantly aided in their project presentations and the demonstration of potential long-term benefits.

DNR Response: The department is happy to hear about this indirect benefit.

Issue: Deer Creek OIW listing should be postponed
-I understand that Deer Creek, in Worth County, has also been recommended to this initial list of OIW waters. However, based on a conversation with Senator Bartz there is sufficient local concern about the how listing Deer Creek as an OIW water would impact drainage in this area, that I would recommend Deer Creek listing be postponed. There clearly is need for more time to adequately explore and discuss the concerns. One of the strong points of this OIW category is the flexibility it affords Iowa in finding that

compromise space between protection and local concerns. Removing Deer Creek from this initial list exercises this flexibility and helps build trust around this sensitive water quality issue.
-We believe that all the waters proposed on this list are Outstanding Iowa Waters, however if there is one in particular, Deer Creek, that does not have community support, we are not opposed to further examination as to why this is listed.

DNR Response: Deer Creek in Worth County is without question one of Iowa's most diverse and productive warm water streams. It possesses one of the most diverse and abundant populations of aquatic life, especially for fresh water mussels. Most streams in Iowa no longer have mussels present; Deer Creek has an incredible abundance and diversity of mussels including thirteen different species, four of which are state threatened species. This is truly a very rare resource in Iowa, if not the Midwest.

As discussed in the regulatory analysis, the initial listing of OIWs is intended to have a minimal regulatory impact. In fact, the department has no known records of any Clean Water Act regulated activities ever occurring in the portion of Deer Creek watershed proposed for listing. The department is aware of concerns in the area that categorizing Deer Creek as an OIW will regulate tile line discharges and that septic tanks will be prohibited. The concerns are not true. There are no plans to regulate the discharge from tile lines at this time or in the foreseeable future, nor will septic tanks be prohibited (see "Issue: Septic Tanks and OIW"). It is disputed whether tile line discharges ever could be regulated. The department is not aware of any other regulatory concerns in this area.

It appears that these comments seemed to be based on a calculation that if Deer Creek is removed from the final rule that it will result in support for the rest of the rule package rather than arising from a legitimate regulatory concern. In this case, if the department were to remove Deer Creek from the final rule package under these circumstances it would set a precedent that OIW protection is mostly based on the level of support rather than the unique nature of the resource and actual regulatory impacts. Since Deer Creek is truly one of Iowa's most unique warm water streams and there are no known regulatory impacts now or in the history of this watershed, the department has determined it is appropriate to continue to move forward with the nomination of Deer Creek as an OIW to afford it protection commensurate with its ecological value to the state of Iowa.

Issue: Deer Creek legal description is inaccurate

DNR Response: This has been corrected in the final rule.

Issue: Are there manure application restrictions as a result of Tier 2.5?
-Precipitation induced run-off from fields where manure applications have taken place in compliance with agronomic manure application rates are considered to be agricultural

storm water discharges. To the extent that an agricultural storm water discharge occurs from a manure application field, the antideg rule cannot establish an effluent limit for the discharges other than the agronomic limits in the nutrient management plan. Farmers should not be prohibited from applying manure as fertilizer in these watersheds nor should they be limited to an amount that is less than the agronomic rate specified by EPC's Chapter 65 rules. As provided above, these watersheds include 115,000 tillable acres which require fertilization to maximize its productive capacity to grow food, feed and fuel for the world.
-The regulatory analysis fails to identify whether this rule will authorize additional manure application restrictions in these watersheds. If this rule will authorize additional restrictions, it fails to identify increased costs as a result of these additional restrictions. We would ask the department to clarify that Chapter 65 manure application rate limits apply and are unaffected by this rule. Further, we ask that the department clarify that agricultural storm water run-off is not considered to be a discharge subject to analysis under this rule.

DNR Response: There are no additional manure application restrictions as a result of a water body being categorized as an OIW.

Miscellaneous
-How does EPC control dead snakes and other vermin that contaminate our streams?

DNR Response: This question is not related to regulatory analysis for Tier 2.5. However, it should be noted that there are no regulations the department is aware of that addresses the issue of dead snakes in Iowa's surface waters.

APPENDIX 1:
COMMENTATORS FOR ARC 7368B (Published on November 19, 2008)

The following is a list of the individuals and organizations that commented on the proposed rule changes during the public comment period that closed on January 29, 2009. The commentators are grouped into similar categories and are listed in alphabetical order by organization or individual depending on the category.

Organizations

Rick	Schwark	Absolute Energy, LLC.
Linda	Hoehn	Alcoa Inc.
Rachelle	Howe	Allamakee County Economic Development
Brian T.	Ridenour	Allamakee County Engineer's Office
Tom	Green	Allied Construction/Greene Limestone
Nicole	Molt	Association of Business and Industry
Sherman	Lundy	BMC Aggregates L.C.
Mike	Root	Bruening Rock Products, Inc.
Ron	Batz	Center Lake Improvement Protective Association
Howard	Paul	Center Lake Improvement Protective Association
Joe	McGuire, Ph.D.	Cessford Construction Company
LaNeil	McFadden	City of Central City
Royce	Hammitt	City of Des Moines
Tom	Kane	City of Hawarden
Tom	Underwood	City of Lake Park
Tom	Meyer	City of McGregor
James	Hicks (Mayor)	City of Montezuma
Ricky	Mach	City of Sioux City
Larry	Smidt	City of Waukee
Joe	Cunningham	City of Waukon
Brian	Dunt	City of West Union
Dave	Coots	Coots Materials Company
Mike	Wallace	Dallas County Conservation Board
Dan	Golightly	Dallas County Soil & Water Conservation District
Ray	Harden	Dallas County Soil & Water Conservation District
Sam	Spellman	Dallas County Soil & Water Conservation District
Ron	Storm	Dallas County Soil & Water Conservation District
Doug	Volz	Dallas County Soil & Water Conservation District
Garlyn	Glanz	Delaware County Conservation Department
Linda	Kinman	Des Moines Water Works
Charles	Vigdal	Dickinson County Conservation Board
Jane	Lieb	East Okoboji Lakes Improvement Corporation
Brad	Klein	Environmental Law & Policy Center
Robert	Riley	Feed Energy Co.
Winnie	Gleason	Fox Engineering
Jim	Merideth	Fox Engineering

Steve	Van Dyke	Fox Engineering
Darryl K.	Halling	Friends of Iowa's Lakeside Laboratory
Dan	Towers	Greene County Conservation Board
Bert	Sewell	Hallett Materials
Dean	Elder, Jr.	Hawkeye Fly Fishing Association
Ryan	Maas	Hawkeye Fly Fishing Association
Mike	Schrader	Hawkeye Fly Fishing Association
Steve	Veysey	Hawkeye Fly Fishing Association
Mike	Henningsen	Henningsen Construction
Mike	Halde	Howard R. Green Company
Don E.	Brazelton	Iowa Association of County Conservation Boards
Mindy	Larsen Poldberg	Iowa Corn Growers
Shannan	Garretson	Iowa Environmental Council
Lynn	Laws	Iowa Environmental Council
Marian	Riggs Gelb	Iowa Environmental Council
Christina	Gruenhagen	Iowa Farm Bureau
Marvin	Shuley	Iowa Farmers Union
Kim	Stroud	Iowa Lakes Protective Association
Jessica	Hyland Harter	Iowa League of Cities
Rich	White	Iowa Limestone
Dick	Ramsay	Iowa Natural Heritage Foundation
Kevin	Vinchattle	Iowa Poultry Association
Monte	Shaw	Iowa Renewable Fuel Association
Emily	Piper	Iowa Rural Water Association
Kevin	Moler	Iowa Water Pollution Control Association
Daryl	Parker	Jackson County Conservation Board
Larry	Gullett	Jones County Conservation Board
Michele K.	Olson	Jones County Conservation Board
Lawrence	Pisank	Jones County Conservation Board
Michael	Rogers	Jones County Conservation Board
Russ	Van Behrer	Jones County Conservation Board
Lindsey	Falk	L.R. Falk Construction
???	???	Lower Beaver Creek Watershed Group (WAVE)
Ryan	Carlson	Martin Marietta Materials
Todd	Clock	Martin Marietta Materials
Bill	Gahan	Martin Marietta Materials
Wendy	Munson Scullin	Midwest Ethnohorticulture
Michael	Scullin	Midwest Ethnohorticulture
Penney	Morse	Mitchell County Residents for Pure Water
Stan	Walk	Mitchell County Supervisor
Mike	Delaney	North Raccoon River Watershed Association
Phil	Petersen	Okoboji Protective Association
Joe	Pille	OMG Midwest, Inc.
John	Linquist	Pheasants Forever Inc.
Frank	Spillers	Progressive Rural Iowa Development
Thomas	Scott	River Products Company, Inc.

Todd	Scott	River Products Company, Inc.
Greg	Schildberg	Schildberg Construction
Neila	Seaman	Sierra Club
Donna	Buell	Sierra Club - Prairie Lakes Group
Ron	Fadness	Skyline Materials
Clel	Baudler	State Representative - District 58
Dan	Swann	Sun Prairie Farms, Inc.
Brett	Lorenzen	Trout Unlimited - North Bear Chapter
Carolyn G.	Sheets	Vanderpool Construction, Inc.
John	Kulper	Wendling Quarries Inc.
Barbara	Schroeder	Winneshiek County Conservation Board

Private Citizens:

Tim	Ackarman	Natasha	Bures
James	Adam	Susan	Burgess
Dennis	Albertson	Anne	Burnett
Louise	Alcorn	Mark	Buskohl
Dena	Alden	Sondra	Cabell
Daniel	Allen	Charles	Camp
Sarah	Allen	Michael	Carberry
Mary	Amerman	Megan	Carberry
Steve	Anderson	Thomas	Carsner
Barbara	Aszman Stone	Anthony	Carter
Mallory	Austin	Pat	Cashman
Linda	Bader	Allison	Castle
Steve	Ballenger	Harlan	Christenson
James	Barnhart	Sue	Christiansen
Will	Barton	Frank	Cicciarelli
Frank	Belcastro	Jane	Clark
Laura	Belin	Janet	Clark
Scott	Bents	Matt	Clark
James	Berge	Richard M.	Coffey
Mel	Berryhill	Carole	Connet
Jamie	Beyer	James	Cook
Shawn	Blaesing-Thompson	Judith	Cooper
Tanya	Boerhave	Sandra	Corn
Mark	Bohner	Richard	Correll
Tony	Borich	Mary	Crooks
Cindy	Borske	Jennifer	Dammann
Daryl	Bosma	Jack	Darland, Jr.
Patrick	Bosold	DJ	Davis
Jay	Brady	Melissa	Devlin
Bill	Brown	Richard	Dietz
Angela	Brubaker	Angela	Dougherty
Donna	Buell	Mary	Downing
Cheryl	Buntsma	Caroline	Druschke

Sonya	Dykhuis
Evelyn J	Dymkowski
Mark	Edwards
Marsha	Eppert
Diane	Ernst
Megan	Etheridge
Ben	Eversage
Deborah	Eversage
Harvey	Fascher
Charlene	Ferguson
J Richard	Fikuart
Julie	Fischer
Michael	Flaherty
Kevin	Fossum
Julie	Fossum
Jim	Fox
Lynn	Fox
Shelly	Fox
John	Fredrickson
Laura	Frescoln
F.	Frette
Carol	Fuchs
Patricia	Fuller
Patricia	Fuller
Adam	Galluzzo
Ellen	Garaffa
Marybeth	Gardam
Mary	Gardner
J H	Gardner, M.D.
Nita	Garvin
Jim	Gates
Caryl	Gatzke
Thomas	Gearing
Lori	Geiger
Erika	George
Marco	Giannakouros
Jody	Gibson
Bob	Glass
Evelyn	Glazebrook
Ben	Gleason
Phyllis	Goodman
Maxine	Goodyear
Janis	Grant
Dennis	Gratz
Tyler	Griffin
Melanie	Griffith
Barbara	Gross
Ambre	Grund
Helena	Hadek
Hubert	Hagemann
Virginia	Hagemann
Eden	Hall
Sharon	Hall
Matt	Hansen
Jayme	Hansen
Loren	Hansen
Ruthanne	Harstad
Holly	Hart
Randall	Hart
Sarah	Hart
Ann	Hass
Pat	Hayes
Mary	Hays
P.L.	Headley
Anna	Hebberger
Jan	Heeren
Alan	Henderson
Ruth	Henson
Steven	Herwig
Rachel	Heuertz
David	Heyden
Sharon	Hicks
Cindy	Hildebrand
James	Hill
Elizabeth	Hill
Del	Holland
Patti	Holmlund
Nathan B.	Hopkins
Richard L.	Howard
Julie	Hoy
Rich	Hrabak
Timothy	Hubbard
Rob	Huffman
David	Huggins
Steve	Hummel
Charles R	Huntley
G. David	Hurd
Dennett	Hutchcroft
Jim	Hyde
Merle	Ihne
Gerald	Iversen
Lena	Jennings

Randal	Jensen
Heather	Jergens
Joan	Jess
Rebeca	Jimenez
Jim	Johnson
Julia	Johnston
Judy	Jones
James H	Jorgensen
Jane	Kauzlarich
N.	Kemp
Charles	Kimpston
Christine	Kirpes
Erwin	Klaas
Frank	Klaus II
Philip	Klein
David	Koester
Mary	Koester
Kay	Kopatich
Robb	Krehbiel
Kathy	Krug
Kevin	Krumwiede
Gary D.	Kruse
Kirsten	Kuhre-Holmquist
Holly	Kukkonen
Veronica M.	Lack
Sandra	Ladegaard
Victoria	Laird
Marilyn	Langhurst
Dennis	Lansink
Brian	Larsen
Michael R	LaValle
Robert	Lemlin
Dena	Lewerke
Judith	Lonning
Aiyanna	Looney
Terry	Lowman
Johana	Lozano
Pam	Mackey-Taylor
Phyllis	Mains
Jen	Manders
Jerry	Martin
Jo	Martin
Susan	Martin
P	Martinson
William	Maxwell
Mary	Mcbee
Brandi	Mccauley
Tamra	McConoughey
Martha	Mccormick
Jim	Mccormick
Constance	McCrary
Mike	McGill
Richard	McGrath
Jo Ann	McNiel
Lisa	McVey
Sue	Meggers
Ronald	Meier
Barbara	Mendenhall
Mitch	Merry
Mary	Meyer
Jody	Michael
Carol	Miller
Nancy	Miller
Carmen	Minor
Monica	Monk
Janet	Monk
Jeff	Moore
Brian	Morgan
Margie	Morgan
Penney	Morse
Jim	Murdock
Michael	Murphy
Terri	Nederhiser
Gerald	Neff
Cheryl	Nelsen
Debbie	Neustudt
William	Niemi
Dixie	Nihsen
David	Nolte
Bill	Nolte
Chad	Oberdoerster
Phyllis	O'Daniels
David	Oliver
Nelson	Olivier
Frank	Olsen
Carla	Osborne
Rhea	Osland
Hayley	Parke
Dylan	Parker
Brandon	Parsons
Rosie	Partridge
Dawn	Pawlowski

Perry	Pearson
James E	Pede, Jr.
Grace	Percival
Susan	Perez
Steve	Perry
James E	Peterson
Eric	Peterson
Susanne	Phiilips
John	Pielemeier
Jennifer	Poeschel
Frank	Potter
Cynthia	Prince
John	Proeller
Jan	Rahmani
Maria	Ramirez
K J	Rebarcak
Darrell	Reed
Mark	Rensink
Dennis	Reynolds
Gail	Rhodes
Ann	Richards
William	Riddle
Steve	Roe
Calvin	Rozenboom
David	Russet
Gary	Sanborn
Mark	Sarcone
Brad	Schabel
Claudia	Schabel
Al	Schafbuch
Barb	Schmidt
Chris	Schoon
Linda	Schrader
Maxine	Schrader
Nancy	Schrader
Jeffrey	Schuldt
Miles	Schumacher
Stephanie	Schumacher
Patrick	Schwery
Leland	Searles
Karl	Seifert
Nathan	Shaw
Mike	Shay
J.	Sherer
Philip	Sheridan
Marvin	Shirley
James	Shoemaker
Claudette	Showalter
Jane	Shuttleworth
G.	Simerson
Carole	Simmons
Thomas	Skadow
Sharon	Smith
William J	Smith
Isabella	Smith
David	Smith
Lois	Smith
Ronald	Smith
David	SmolikHagen
Virginia	Soelberg
Ronald	Spears
Joan	Stearns
Laura	Stebbins
J.C.	Steffen
Andy	Stevenson
Alissa	Stoehr
Larry	Stone
Brian	Stroup
Danette	Sumerford
Douglas	Sumerford
Rita	Swan
Douglas	Swan
Randy	Tarlton
Bobbi	Tarlton
Randy	Taylor
Randy	Taylor
Charles	Terzono-Borovic
Jenna	Thomas
Gina	Thomas
Steven	Thompson
Faye	Thompson
Jamie	Thompson
Ray	Thys
Noreen	Tonkin
John	Turner
Cade	Ullerich
John	Urbain
Amanda	Van Daalen
Peter	Van Der Linden
Judy	Van Der Linden
Helen	Van Hoozer
David	VandonBoom

Junnia	Veach
Todd	Von Ehwegen
Jim	Vorland
Brad	Walker
Casey	Walling
Brian	Walshire
Bob	Watson
Cheryl	Weaver
Kriss	Wells
Debbie	Wheeler
Pam	White
Tamara	Wilde
Cathy	Wilkinson Barash
John	Wills
Larry	Wilson
Harley	Winfrey
Brian	Winkel
Charles	Winterwood, M.D.
Priscilla	Witke
David	Witke
Abigail	Wright
Mike	Wyrick
Nancy	York
Kody	Zahrobsky
Carolyn	Zaiser
Sarah	Zinn-Burggraaf
Marilyn	Zyzda

APPENDIX 2:
COMMENTATORS FOR ARC 8038B (Published on August 12, 2009)

The following is a list of the individuals and organizations that commented on the proposed rule changes during the public comment period that closed on September 15, 2009. The commentators are grouped into similar categories and are listed in alphabetical order by organization or individual depending on the category.

Organizations

Randy	Beavers	Des Moines Water Works
Orville	Berg	SWCD
Phil	Dorff	Sunrise Over Bear
William	Fanter	Sunrise Over Bear
Hugo	Franzen	ISU Professor
Marian	Gelb	Iowa Environmental Council
Adam	Hammes	Urban Ambassadors
Rick	Lampe	Buena Vista University Professor
Jane	Lieb	East Okoboji Lakes Improvement Corporation
Brett	Lorenzen	Trout Unlimited
Ryan	Maas	Hawkeye Fly Fisherman Assc.
Mike	May	Sunrise Over Bear
Scott	Meissner	Hickory Hills Farms Inc.
Carlton	Mitchell	City of Orleans
Jim	Murdock	ISU Professor
Steve	Neibuhr	Sunrise Over Bear
Phil	Petersen	Okoboji Protective Association
Edward	Power	Sunrise Over Bear
Donna	Prizgintas	Iowa Organic Association
Larry	Reis	Winneshiek County Conservation
Dave	Rosset	Central Iowa Fly Fishers
Mark	Runquist	High Hopes Gardens
John	Saunders	EOLIC
Leland	Searles	DMACC Instructor
Dave	Strief	Sunrise Over Bear
Wally	Taylor	Sierra Club
Steve	Veysey	Hawkeye Fly Fisherman Assc.
Paul	Weeks	Sunrise Over Bear

Private Citizens

Amy	Alesch	Vickey	Baker
Jane	Alexander	Karen	Baker
Greta	Anderson	Steve	Ballenger
James	Anderson	Lisa	Bean
Michael	Andorf	David	Bedell
Gary	Baker	Frank	Belcastro

Laura	Belin
Scott	Bents
David	Bequeaith
James	Berge
Jean	Boomershine
William	Boon
Cindy	Borske
Martha	Boysen
Mara	Brettner
John	Brostad
Angela	Brubaker
Charles	Buche
Donna	Buell
JK	Burgess
Susan	Burgess
Courtney	Cable
Douglas	Caffrey
Marc	Campbell
Michael	Carberry
Jack	Carlson
Michael	Carrico
Tom	Carsner
Allison	Castle
Sue	Christiansen
Frank	Cicciarelli
Marc	Clark
Jeff	Clausen
Judy Ann	Cohen
Steph	Colsrud
Jan	Corderman
Mary Lee	Cox
James	Crago
Jerald	Crew
Mary	Crooks
Beverly	Cummings
Barbara	Dale
Jim	Dale
Jim	Dane
Russ	Davis
Kathryn	Dawley
Yvonne	Dawson
Laura	DeJong
Patrick	Deming
Ted	Dixon
Beth	Drewelow
Barbara	Eckstein
Megan	Etheridge
Deborah	Eversage
James	Fahrion
David	Farrell
Harvey	Fascher
Jan	Flora
Cornelia	Flora
Larry	Foley
Matthew	Franklin
Donna	Frost
Patricia	Fuller
Ellen	Garaffa
Lori	Geiger
Holly	Gettys
Jody	Gibson
Deke	Gliem
Maxine	Goodyear
Gretchen	Graff
Jan	Grant
Janis	Grant
Hank	Grant
Dennis	Gratz
Kristi	Gray
Henry	Gray
James	Greif
Judy	Gronau
Carol	Gronstal
Richard	Gruhl
Hubert	Hagemann
Virginia	Hagemann
Joanne	Hailey
Sharon	Hall
Darryl	Halling
Tammy	Hamin
Barbara	Hans
Loren	Hansen
Matt	Hansen
Jayme	Hansen
Marcia	Hansen
Duane	Harris
Sarah	Hart
Randall	Hart
Gary	Harter
John	Hawn
Michelle	Heater
Jo Anna	Hebberger

Dennis	Heimdal
Randy	Heitz
Annissa	Helm-Loyd
Louise	Henderson
Harold	Hensel
Steven	Herwig
Rachel	Heuertz
Nick	Hey
Nancy	Heyer
S. Vance	Hjelm
Jay	Hofland
Carla	Hofland
Del	Holland
Stephanie	Holloway
Patti	Holmlund
Max	Holtz
Nathan	Hopkins
Suzette	Hoyt
Marie	Huggins
Becki	Huisenga
Steve	Hummel
Paul	Hunter
John	Ippolito
Leo	Isaac-Dognin
Gerald	Iversen
Rita	Iversen
Mike	Jacobs
Andrew	Jenkins
Mary	Jones
James	Jorgensen
Kerry	Jorgensen
Daniel	Kayser
Margaret	Kearney
David	Kemp
Kathleen	Kerns
Carlton	Kjos
Frank	Klahs II
Philip	Klein
Kurt	Kleinschnitz
Christy	Kleinschnitz
Thomas	Knapp
John	Koch
Wayne	Koehler
David	Koester
Mary	Koester
Kerry	Kroneman
James	Krull
Holly	Kukkonen
Karla	Kula
Russell	Kurth
Sandra	Ladegaard
Gary	Lange
Steven	Langland
Dennis	Lansink
Anita	Larsen
Heidi	Larson
Lindsey	Larson
Darin	Larson
Nathan	Lein
Jessica	Leo
David	Linde
Katherine	Lodge
Amy	Long
Linda	Lovell
Gordon	Lundberg
Fred	Lundt
Chris	Lyness
John	Lyon
Jen	Manders
Jo	Martin
Jerry	Martin
P	Martinson
Dona	Matthiesen
Mary	McBee
Brandi	Mccauley
Tamra	McConoughey
Martha	McCormick
Jim	McCormick
Emma	Mccown
Michael	McFarland
Mike	McGill
Ken	Mckillip
Emily	Mclain
Robert	McNair
Myron	McVeigh
Nancy	Miller
Lorne	Miller
Carmen	Minor
Michael	Mitchell
John	Moellers
Mary Ann	Montgomery
Bryan	Mowrer

Julia	Natvig
Gerald	Neff
Debbie	Neustadt
Robert	Nicholson
Karen	Nicholson
David	Nolte
Duane	Ohnemus
Frank	Olsen
Rhea	Osland
Dylan	Parker
Bob	Pauls
Tim	Paus
Nicholas	Podhajsky
Ralph	Porter
Maria	Ramirez
Shirley	Rath
Allie	Rath
Sheila	Rayburn
Margarite	Reynolds
Nancy	Ridenour
Robert	Ritscher
Jennifer	Rollings
Deidre	Rosenboom
Deborah	Rossum
Ed	Roth
John	Rotto
Velma	Rouse
Tina	Royer
Steve	Rozeboom
Denyce	Rusch
Dustin	Sage
Andrew	Saito
Gary	Sanborn
Jane	Sanders
Mark	Sarcone
Richard	Sayles
Brad	Schabel
Ruth	Schafbuch
Al	Schafbuch
Matthew	Schechinger
Vanessa	Schempers
Carolyn	Schmidt
Barb	Schomaker
Maxine	Schrader
Nancy	Schrader
Mike	Schrader
Dian	Schueller
James	Schueller
Miles	Schumacher
Stephanie	Schumacher
Patrick	Schwery
Robert	Sessions
Jean	Sharff
Heather	Sheets
Kevin	Shilling
John	Shillinglaw
Jane	Shuttleworth
Isabella	Smith
Ron	Smith
David	Smolikhagen
Virginia	Soelberg
Douglas	Steele
Barbara	Steinmann
Alissa	Stoehr
Mary	Stork
Mark	Straka
Kim	Stroud
Gretchen	Swan
Timothy	Sweet
Jackie	Sweet
Matthew	Tapscott
Denise	Tapscott
Gina	Thomas
Karen	Tigges
Jim	Trepka
Richard	Trieff
Derrick	Vagts
Judy	van der Linden
Peter	van der Linden
Margaret	Vernon
Myralee	Voots
Dana	Wade
Brad	Walker
Don	Wall
Kay	Wall
Donald	Walsh
Patricia	Weeks
Mark	Welter
Sue	White
Peter	Wicks
Becky	Wilberding
Vincent	Willey

John	Wills	Michael	Wyrick
Joseph	Wilson	Lelia	Yeutter
Kristine	Winber	Dario	Zaffarano
Charles	Winterwood	Carmelle	Zserdin
Abigail	Wright	Glen	Zubrod

APPENDIX 3:
COMMENTATORS FOR THE REGULATORY ANALYSIS FOR ARC 8038B
(Published on October 21, 2009)

The following is a list of the individuals and organizations that commented on the proposed rule changes during the public comment period that closed November 10, 2009. The commentators are grouped into similar categories and are listed in alphabetical order by organization or individual depending on the category.

Organizations

Brad	Klein	Environmental Law & Policy Center
Jim	Johnson	Hardin County Board of Supervisors
Steve	Veysey	Hawkeye Fly Fisherman Association
Marian	Gelb	Iowa Environmental Council
Christina	Gruenhagen	Iowa Farm Bureau Federation
Jessica	Harder	Iowa League of Cities
Rich	White	Iowa Limestone Producers Association
Rosalyn	Lehman	Iowa Rivers Revival
Emily	Piper	Iowa Rural Water Association
Mike	Delaney	Raccoon River Watershed Association
Todd	Scott	River Products
Wally	Taylor	Sierra Club
Brett	Lorenzen	Trout Unlimited
Mary	Hanson Harrison	Women's International League for Peace & Freedom
Evelyn	Glazebrook	Women's International League for Peace & Freedom

Private Citizens:

Paul	Alexander	Elise	Fillpot
Mary	Amerman	Tim	Fink
Richard	Baker	Kim	Francisco
David	Bequeaith	Riley	Gardam
Kayla	Bogenrief	Marybeth	Gardam
Patrick	Bosold	Bill	Gardam
Cheryl	Buntsma	J	Gardner
Charles	Carnes	Shannon	Garretson
Thomas	Carsner	Burt	Gearhart
John	Cook	David	Gerleman
Ray	Cook	Jody	Gibson
James	Crago	Jody	Gibson
Richard	Dietz	Kendra	Gilbert
Ted	Dixon	Deke	Gliem
Risa	Dotson Eicke	Gretchen	Graff
Chuck	Dusing	Reuben	Grandon
Chant	Eicke	Jan	Grant
Joy	Evans	Hank	Grant

Kara	Grasty
Dennis	Gratz
Bonnie	Grimmius
Carol	Gronstal
Barbara	Gross
Hubert	Hagemann
Virginia	Hagemann
Joe	Harms
Holly	Hart
Phillip	Hascall
Michelle	Heater
Antonio	Iaccarino
Brad	Jesse
Keith	Johnson
Beth	Jones
Jane	Kauzlarich
Meghan	Kennedy
Larry	Kinsinger
Frank	Klahs II
Diane	Krell
Kathy	Kruse
Steve	Langland
Mary	Lauer
Lynn	Laws
Darlene	Lepon
Jan	Libbey
Jane	Lieb
Judy	Lonning
Jamie	Lynch
Phyllis	Mains
Margaret	Marie
Jo	Martin
Dona	Matthiesen
Penelope	Mazza
Mary	McBee
Emma	McCown
Timothy	McQuillan
Dan	Meier
Loree	Miles
Janet	Monk
Collin	Moon
Bryan	Mowrer
Jim	Murdock
Mike	Murray
Chad	Oberdoerster
Jean	O'Donnell
Matt	Ohloff
David	Oliver
Pat	Parks
Marilyn	Platner
Judy	Porter
Jim	Redmond
Darrell	Reed
Robert	Riley
Paula	Rissman
Robert	Ritscher
Nancy	Roberts
Larry	Rowley
Ken	Rozemboom
Mary	Runkel
Gary	Sanborn
John	Sanders
Diana	Sanders
Al	Schafbuch
Mike	Schrader
Linda	Schrader
Miles	Schumacher
Carol	Schutte
Leland	Searles
Rob	Shaffner
Jeremy	Shipley
Charlotte	Shivvers
Susan	Shullaw
Joy	Smith
Andrew	Snow
Virginia	Soelberg
Susan	Szczech
Brett	Tratchel
Richard	Trieff
Paul	Vaassen
Carolyn	Vincelli
Margaret	Weiner
Kim	Wemer
Kim	Wilkins
Cathy	Wilkinson
Vincent	Willey
Larry	Wilson
Charles	Winterwood
Robert	Witt, Jr.
JaJa	Yang
Louise	Young